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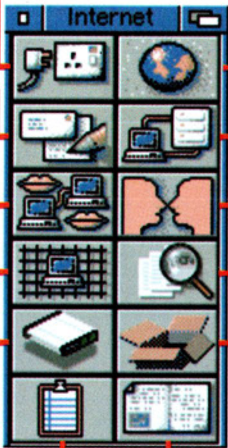
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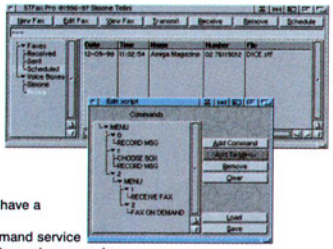
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- **MIME Prefs** - Central MIME prefs interface means that you only need to setup file types once with on nice interface! This saves masses of time and effort (especially for beginners).
- **Programs are now keyfile based** (can be used with any TCP stack - Miami etc)
- **Dock bar** - allows you to create multiple dock bars with point and click ease - just drag the icons you have created into the icon bar! NetConnect v2 is pre-setup with its own icon bar for ease of use.

NetConnect v2 CD [contains many extras: datatypes, MIME types (for www browsing) and much more] **£59.95**
NetConnect v2 Upgrade from v1 [registered NetConnect v1 users only] **£call!**

stfax professional (new version 3.3) £29.95

STFax Professional is new commercial fax and voice mail program which enables you to use your Amiga as a digital answer machine, send and receive faxes from most Amiga programs and setup a mini-BBS. Ever wondered who companies manage to create their voice based operator system? You can do this at home! 'Press one to leave a message for Mike or press two to leave a message for Sue'. STFax is also ideal for the small business owner: setup a fax on demand service (so customers can receive information about your products 24 hours a day), advanced message box system for the employee's, log callers via caller-ID, control other programs etc. New v3.3 offers you even more powerful voice features, including:



- **Full Fax Features:**
  - **Full Fax/Modem Class (1, 2, 2.0) Support**
  - **Phonebook** - store all your fax and telephone numbers
  - **Scheduler** - store fax messages to send at specified times
  - **Broadcasting** - send one fax to more than one recipient
  - **Reports** - quickly see when a fax was sent and received
  - **Printer Driver** - redirect all print-outs to a fax file (print from Wordworth, Pagestream, Final Writer, a text editor etc!)
  - **Fax Viewer** - view outgoing/incoming fax messages
  - **Fax Forward** - forward faxes to another machine
- **Advanced Voice Features:**
  - **Advanced Digital Answer Machine** - unlimited storage space
  - **Multiple-User** - assign voiceboxes to individual users. A family could have a voicebox per member and receive their own voice messages.
  - **Advanced Voice Scripting** - create your own voice network/fax on demand service
  - **Use the Modem as a Telephone** - make and receive calls via STFax Pro and your modem
  - **Remote Access** - listen to your messages from an external source. ie. from another phone or even country!
  - **Caller-ID** - see who is calling you (number and name of caller), choose to intercept the call or allow STFax to auto-answer, see who has left a message and 'reply' to the caller via the modem, attach a personal greeting to a specific phone number and only that person hears the message.
  - **External Program Control** - start an arexx script when an incoming call is detected or when the caller has hungup and control other programs. A music player could pause for an incoming call and then continue when call has ended.
  - **Call Screening** - blacklist phone numbers. Sick of sales people calling after 6pm? Nuisance callers? Blacklist their numbers (you can even blacklist 'withheld', 'unavailable' and 'international' numbers) so STFax either ignores their call or simply plays a custom greeting "sorry, this household does not welcome cold sale calls"! You can also set priorities per caller - STFax notices an important caller, it plays a warning sound.
  - **Call Scripts** - setup scripts to perform an action on an incoming call, eg. pause your music software until the call is ended.
- **Independent Operation Mode** (new in v3.3!):
  - Modem works independently from Amiga to store faxes or voice messages. Download new messages or faxes to STFax Pro and then view/play/manage them within the software.
  - Software fully supports the Independent Operation mode of the PACE 'Solo' you can upload a greeting to the modem, setup a remote retieval password, arrange the unique 'follow me' feature (modem contacts you by mobile phone when you have messages) and switches the independent mode on and off (on exit). 3-Com 'Message Plus' modem is also supported (but this modem has far more limited features than the 'Solo' and no UK Caller ID support).

high quality modems from..£69.95

Choose from three high-quality **branded** modems - the top of the range, award winning PACE 56K, the new PACE 'Solo' 56K or the middle of the range Dynalink 'MagicXpress' modem (same colour as your Amiga). All ship with a five year warranty. The PACE modems also ship with free lifetime technical support, UK caller ID (only modem available which supports this), a superb speakerphone, conferencing feature, volume slider/control, easy to understand LED's and non-technical, easy to read documentation. The PACE is currently the best 56K modem you can buy, virtually winning every single modem roundup in the PC, Internet and Mac press. All PACE and Dynalink 'MagicXpress' 56K modems are now v90 shipping ready - the agreed standard for 56K connectivity. Why not treat yourself to the brand new PACE 'Solo'? The 'Solo' be used standalone from your Amiga. Want to go on holiday but need to receive fax and voice messages, but don't want to leave your Amiga running? The 'Solo' is the answer.

PACE External 56K Modem



- Quality branded PACE 56 voice modem
- v90 ready (new 56K standard)
- 5 year warranty, life time free technical support
- 56000 bps DATA/FAX/VOICE modem - true v34+ Throughput to 115,200 (230,400 for internal) BPS
- Group 3, Class 1 send/receive FAX (14.4)
- V.80 (video conferencing) capable
- Call Discrimination
- UK Caller ID (unique to PACE modems)
- 10 LED's for full status monitoring
- Analogue Simultaneous voice and data (A.S.V.D.)
- Speakerphone for hands-free operation
- Mute button for secrecy
- Upgradable ROM chip
- On/Off switch to rear of unit
- Volume slider for speakerphone control
- Includes headphones/microphones - voice control
- Serial cable included (with 9 & 25pin connectors)

PACE 'Solo' 56K Modem



The PACE 'Solo' 56K modem replaces your existing fax, answermachine and modem. It can work independently from your Amiga (so you can turn your computer off to receive messages, if you prefer). It contains the features listed to the left and adds:

- Full specification fax/voice answer machine with message replay, time stamping, remote retrieval of messages all operational in stand-alone mode.
- Stored messages accompanied by time, date and caller-id where applicable.
- Stores any combination of approximately 30 minutes of speech or 30 pages of faxes.
- 'Follow Me' allows the 'Solo' to notify your mobile phone when you receive new messages!
- Group 3, Class 1 and Class 2 FAX (14.4)
- 2 sockets for flash memory expansion modules.
- Memory expansion options upto 32Mbits.
- 5 backlit function keys, 11 function keys

Dynalink 33.6K External Voice/Fax/Data Modem	£69.95
Dynalink 56K External Voice/Fax/Data Modem	£89.95
PACE 56K External Voice/Fax/Data Modem	£129.95
PACE 'Solo' 56K External Voice/Fax/Data Modem	£189.95

PACE 'Solo' requires STFax Professional v3.3 for the Independent Operation Mode features

modem pack options from..£79.95

Various money saving packs are available. These are all based on the Dynalink 56K modem. Packs based on the 33.6K or PACE 56K or PACE 'Solo' 56K modem available.

Code	Pack Contents	£ Prices
PK01	56K Modem & STFax	£ 99.95
PK02	56K Modem & NetConnect	£119.95
PK03	56K Modem & NetConnect & STFax	£129.95
PK04	56K Modem & NetConnect & Hypercom1 & STFax	£164.95
PK05	56K Modem & NetConnect & Hypercom3Z & STFax	£189.95

DEDUCT £20 for a Dynalink 33.6K Modem (instead of the Dynalink 56K)
ADD £40 for a PACE 56K Modem (instead of the Dynalink 56K)
ADD £100 for a PACE 'Solo' 56K Modem (instead of the Dynalink 56K)

- All packs come with one month free connection to Demon Internet and/or UK Online
- Choose between the CD or Floppy disk version of NetConnect with your modem pack

high speed serial cards (new models!) from.. £44.95

The ***Hypercom*** range of high-speed serial cards offer your Amiga the fastest connection to the Internet, for comms and fax transfers. Available for the Amiga 1200, A1200 Towers and Zorro-II/III based machines (Zorro version suitable for A1500/2/3/4000 or a A1200 tower).

Model	Machine	Specifications	Price
Hypercom1	A1200	1 x 460,800bps highspeed buffered serial port	£44.95
Hypercom3	A1200T	2 x 460,800bps highspeed buffered serial, 1 x 500K bytes/sec parallel port	£79.95
Hypercom3Z	Zorro-2/3	2 x 460,800bps highspeed buffered serial, 1 x 500K bytes/sec parallel port	£79.95
Hypercom4	Zorro-2/3	4 x 460,800bps highspeed buffered serial ports	£89.95

miscellaneous software

Various other individual software titles are available. These titles may be interesting to those not wanting to purchase NetConnect v2.

	By Disk	By EMail
Miami - TCP/IP Stack for the Amiga	£28.00	£26.00
Scalos - superb new MUI based workbench replacement!	£17.00	£15.00
Voyager Next Generation	£22.00	£20.00
Microdot-II	£20.00	£18.00
AmIRC	£20.00	£18.00
AmFTP	£20.00	£18.00
AmTalk	£17.00	£15.00
X-Arc	£14.00	£12.00
Contact Manager	£14.00	£12.00
AmTelnet + AmTerm Package Deal	£20.00	£18.00

- *5% Discount when 2-4 Vapor products are bought, 10% Discount for 5+*

internet informer/extra information

Still unsure about connecting to the Internet? Want more information? Confused by all the acronyms such as 'ISDN'? Confused about the costs? Ask for our free information pack!

ACTIVE

Oval House, 113 Victoria Road, Darlington, DL1 5JH
Tel : 01325 460116
Fax: 01325 460117
E-Mail: sales@active-net.co.uk
http://www.active-net.co.uk

DELIVERY CHARGES

S'Ware	- £0.50 for UK delivery - £1.00 for EU delivery - £1.50 World delivery
H'Ware	- £4 for 2-3 day delivery - £6 for next day delivery - £call for Saturday delivery

Make cheques/P.O.'s payable to <u>Active Technologies</u> and send to the address listed opposite. We can accept credit or debit card orders. For any additional information call us!

Month In View

Surely the Amiga market can't be growing? It is in parts, according to the latest analysis by **Nick Veitch**...

While the Amiga has been, in terms of development of the platform by its owners at least, "resting" for a while now, there are two major areas of computer use which have more or less kept the whole market afloat.

The first is CD-ROM. As you may remember, we were the first Amiga magazine to bring you a regular CD-ROM edition, and since then, more and more of you have bought CD-ROM drives and become more interested in the technology. We first covered CD-ROM writers over two years ago when they were the expensive reserve of the power user, but as you will see from this month's issue, burning your own doesn't have to be ludicrously expensive and it doesn't require a big-box Amiga either. Check out the reviews of *MakeCD* and the CD writers in this issue to see what I mean.

The other area of growth is, of course, the Internet. While the development of Internet tools and protocols has largely been done by large corporations with the home IBM compatible user in his sights, it is gratifying to see that for ease of use and value for money, connecting an Amiga to the Internet is difficult to beat. While we may not have Shockwave and other Internet plug-ins yet, at least we have TCP stacks which a normal human being can get working, and browsers which can display pages quickly and easily without taking up 200Mb of hard drive space.

If you haven't yet taken the plunge, check out our cover feature this month, and perhaps you might like to enter our amazing competition to get online for free. While we see great advances in these areas, it's hard not to be optimistic about the future of this wonderful machine.



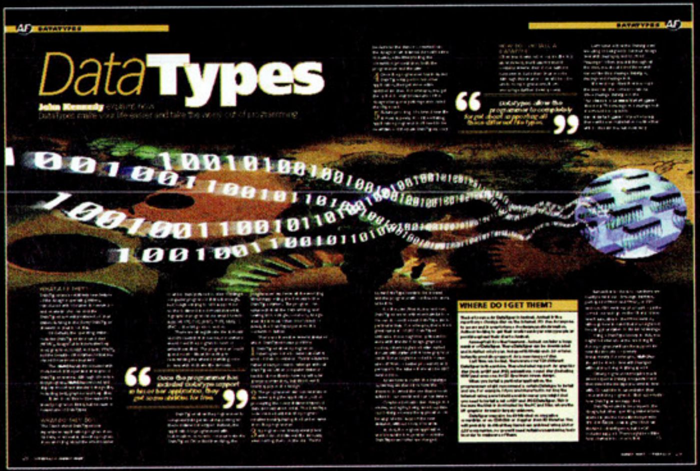
Nick Veitch
Editor



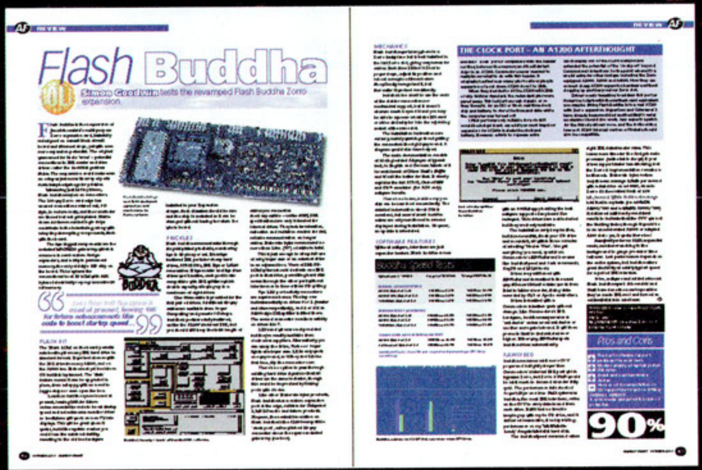
GET ON THE INTERNET PAGE 14
With the latest wave of software, the Amiga is fast becoming the easiest platform to get onto the Internet with. Why haven't you tried it yet?



KITECAM PAGE 22
When we told John Kennedy to go and fly a kite, he took us rather too literally, but at least he sent back some good pictures.



DATATYPES PAGE 28
The Amiga has an efficient and easy way of dealing with the myriad of file formats in the computer industry, but do you know how?



FLASH BUDDHA PAGE 52
We're not sure if it's called the Flash Buddha because it has a flash ROM or because it has a black circuit board...

AMIGA FORMAT Contents

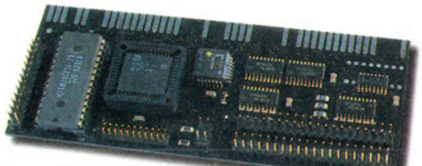
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AF NEWS

AF REGULARS

AF CREATIVE

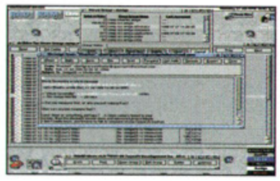
AF SERIOUSLY AMIGA



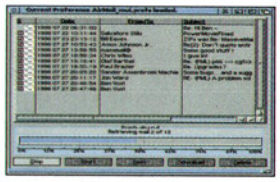
The new-look Flash Buddha Zorro expansion card.



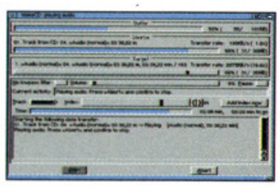
One of the excellent dinosaur images from the massive *Light ROM 6* CD set.



Online newsreading for those who are hooked up to the Internet.



AirMail Pro faces some very strong competition.



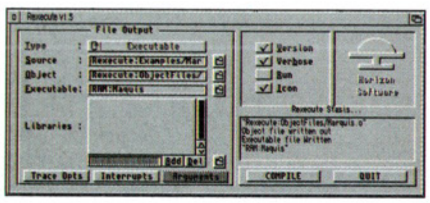
The simplified user interface of *MakeCD 3.2*.



Find out how the Mitsumi 2801 shapes up as an Atapi CD-R.



Has the classic *Amos* been overtaken by the newcomers to the programming scene?



Speed up your applications with *Rexecute*.



A top notch shoot-em-up on the Amiga? *Ultra Violent Worlds* comes out with all guns blazing.



WHAT'S UP?

Tornado flies in
Two new rendering packages are finally to be released in the UK.

Ibrowse updated
The new features of v1.22 explained.

AmigaSOC news
A new user group database and details of a Cologne Show trip offer.

WORLD NEWS

Tornado3D 2.0 shipping, Mage looms

Italian start-up Eyelight are now shipping version 2 of the rather excellent-looking *Tornado3D* rendering software, and are preparing to launch an even more impressive-sounding professional rendering system called *Mage*.

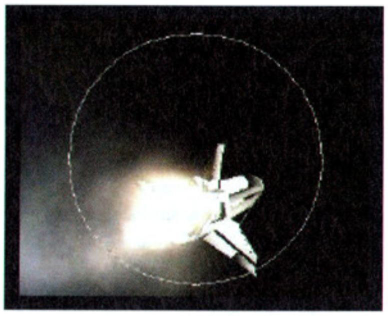
Although not previously officially released in the UK due to a lack of documentation, *Tornado3D* has been generating a lot of interest in the rest of the Europe. In spite of it having a "new concept" in terms of its modelling interface, which is completely different to the likes of *Cinema4D* and *Imagine*, some of the results obtained with it are certainly impressive.

Version 2 finally promises proper English documentation and will be available in the UK. It also supports many new features and improved rendering capabilities, including optimised support for the PPC, which Eyelight claim makes rendering up to nine times faster than on the '060.

> "... the Amiga version will be the first commercial product that actually lists a PPC card as an essential requirement."

Most of the new features are in terms of new texture effects and additions to the rather excellent particle system.

Fractal textures for ground and sky objects will add more realism, and the software will include a unique landscape generator.

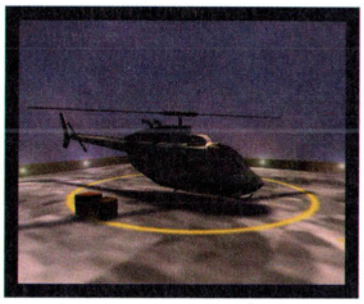




Soft particles and fractal landscape textures are just some of the new features included with *Tornado3D 2.0*.



You should be able to render images like these in minutes on a PPC.



Particles benefit from "soft" and "furry" additions, making effects such as realistic explosions and hairy animals easier to accomplish, and the software now includes its own bones and muscles system.

Essentially, it looks like the developers have studied *Lightwave* and every add-on that has ever appeared for it

Ibrowse 1.22 unveiled

There is a new version of *Ibrowse* available now. Most of the updates are bug fixes for the previous version, such as the Print Document feature, which is actually working now.

One of the more important updates is that *Ibrowse* will now work correctly with *Miami*'s SSL library, allowing *Miami* users access to sites using secure server technology. Most Internet "shops" use this protocol to protect data travelling to and from the remote server.

The upgrade is available free for registered users, and you can download it directly from HiSoft's website at http://www.hisoft.co.uk or from the main Omnipresence site http://www.Omnipresence.com/ibrowse.

Both sites also carry news about features planned for the next upgrade, which will be a full new version including *MPEg*, *QuickTime* and *AVI* support, *VRML* (all accelerated for CV3D owners) and Javascript support.

GTI CHARTS

TOP 25 AMIGA-PRODUCTIVITY

1	CD	Aminet 25
2	CD	Gateway 3
3	CD	Aminet Set 6
4	CD	Amiga Format CD29
5	Audio	Back for the Future
6	CD	Geek Gadgets
7	CD	Amiga Format CD28
8	CD	Aminet 24
9	Disk	Miami 3.x
10	CD	Euro CD 3
11	Disk	Oxyron Patcher
12	CD	Amiga Format CD27
13	CD	Wordworth 7
14	CD	Aminet Set 5
15	CD	Best of Mecomp
16	CD	OctaMED Soundstudio
17	CD	Deluxe Paint 5
18	CD	Tele-Info vol. 2
19	Disk	TurboPrint Pro 6 (English)
20	CD	Aminet Set 3
21	CD	RHS Erotic Collection
22	CD	Workbench Designer 2
23	CD	Elastic Dreams
24	Disk	TurboPrint Pro 6 (DT)
25	CD	Aminet Set 1

GTI are Europe's largest distributor of Amiga CD-ROM titles.





Mage is Eyelight's professional rendering contender and will require an Amiga with PPC.

and then tried to go one better. We will hopefully be able to review this exciting-looking software next issue.

The *Mage* software is not really a direct relation to *Tornado3D*, although some of the ideas and concepts about how the software should work have been taken from the experiences gathered from creating it.

Versions will be released for the Silicon Graphics and PowerMac platforms as well as the Amiga, but the Amiga version will be the first commercial product that actually lists a PPC card as an essential requirement.

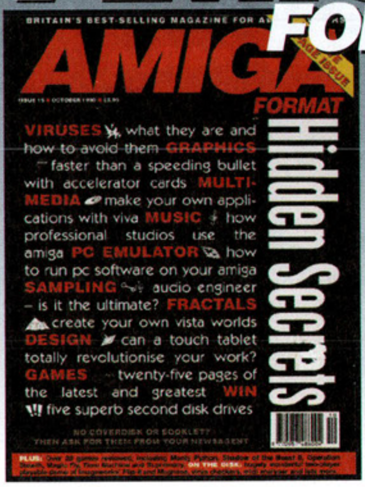
Mage is intended to be professional software and will probably retail in the $1,200 plus price range, so avid raytracers should wait for our review before buying.

You can get up to date information on both of these products from the Eyelight website at www.tornado3d.com, and it is possible to buy the products direct from this site.

Continued overleaf ➡

100 Issues ago AMIGA FORMAT

AF15 October 1990



We look at what was going on in the Amiga market 100 issues of *AF* ago…

■ Cover Feature: Hidden Secrets. There's a booklet of 55 tips on the cover. The hidden secrets are a variety of small features about things like virii and reviews of serious software.

■ On the disks: Only one disk with a demo of *Flip-it* and *Magnose*, as well as a bunch of utilities including one by a certain Jon Potter.

■ News: TV and radio mentions: an unnamed TV show that obviously eventually became *GamesMaster* and a regular programme on Radio 5. GVP announce a 50Mb removable media drive at a cost of $999 for the drive and one cartridge.

■ Prices: Datel were offering a .5Mb RAM upgrade for the A500 with clock (that could be used as fast or chip mem) for £54.99 or £129.99 if you wanted a card with 1.5Mb RAM

■ Games reviewed included: *Magic Fly* by Electronic Arts (88%), *Operation Stealth* by Delphine (90%), *Monty Python's Flying Circus* by Virgin (88%), *Shadow of the Beast II* by Psygnosis (87%) and *Supremacy* by Virgin (90%)

■ Serious products reviewed: Podscat graphics tablet from HB Marketing, *Vista* by VRLI, *Audio Engineer* by GSoft, *Viva* by Microdeal, *KCS Powerboard PC Emulator* by KCS and the *Outline Font Pack* by Gold Disk.

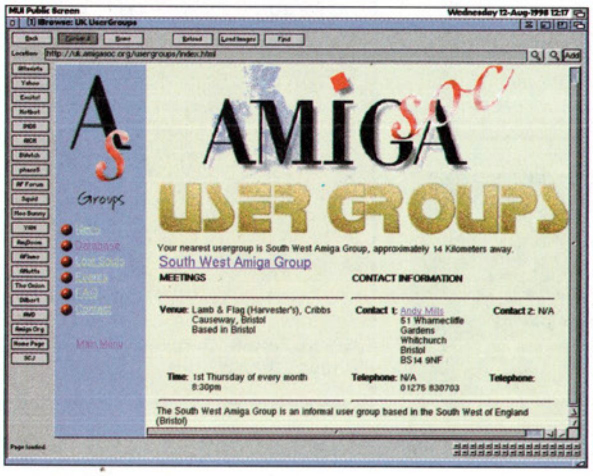
■ Notes: Still no serious review scores and most products were reviewed under 1.3. Hard drives a rarity.

■ Pages: 220 ■ Cost: £2.95

AmigaSOC searchable database

Over the last few months, AmigaSOC UK have been collecting information about all the Amiga user groups in the UK to publish in an online database on their website. This exercise is part of their job as representatives for UGN in the UK. UGN, the User Group Network, is an organisation that is rapidly building a list of user groups all over the world.

Thanks to AmigaSOC's website, you can now locate your nearest user group in two ways. You can either look through a list of groups in your rough geographical area, or better yet, you can use IMM Studio's *Postcode* location database in order to pinpoint the nearest user group to you and even get the distance (very roughly). AmigaSOC intend to take this database further by offering a dealer search facility along similar lines. You can find AmigaSOC's website by surfing to this address: http://uk.amigasoc.org.



The AmigaSOC website now includes a searchable list of user groups.

AmigaSOC Cologne trip

AmigaSOC are organising a trip to Cologne for Computer 98. They are extending an invitation to all Amigans in the UK to join them at what is undoubtedly the best Amiga show in the world. They're aiming to offer a cut-price trip including accommodation. This will be based on numbers, but will only be available on a first-come-first-served basis. At the moment, AmigaSOC are only able to deal with user groups, but that should be a good enough reason for you to get in contact with your local user group!

AmigaSOC's choice for accommodation is the Hotel Berg (http://www.hotel-berg.com), who are offering quite an aggressive discount for groups. If you wish to stay somewhere else, you'll have to organise that yourself, but AmigaSOC are happy to include you in their flights. For other hotels in Cologne, have a look at http://www.cologne-hotels.com.



AmigaSOC have chosen British Midland for the flight to Cologne since they offer a very good group rate, but there's also the possibility of using EuroStar and people can expect to pay less than £200 in total for the flight or train journey and accommodation combined for the weekend, including bed and breakfast.

Payment will have to be made up front in order to be able to book the flight and accommodation and the trip is being organised on a non-profit basis – AmigaSOC are just interested in promoting the show to UK Amigans.

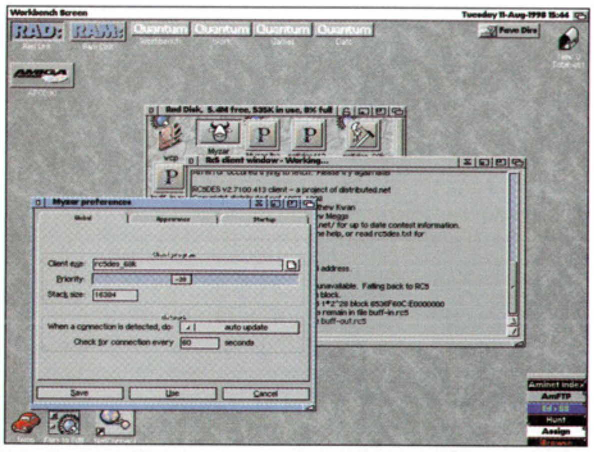
AmigaSOC spokesman Andrew Elia said, "AmigaSOC visited Cologne for the first time last year and we firmly believe that if this show is anything like that, you'll be kicking yourself if you miss it. Imagine a show like the generic computer shows that used to be held in Earls Court in the 80s. Imagine a show where 70% of those stands have Amiga stuff in there. Plus, we at AmigaSOC certainly don't want to miss any big announcements."

AmigaSOC require all payments and bookings to reach them no later than September 20th, 1998, so you haven't got much time to get organised. For further details, contact andrew@uk.amigasoc.org.

RC5 update

Although it might seem like the dim and distant past when we last talked about the RC5 challenge where computers were used in a distributed effort to break encryption methods, the fight is still going on.

The current challenge is based on 64-bit encryption and the Amiga team, led by Thomas Tavoly, is lying in seventh place. Considering the sheer horsepower of the opposition, this is a considerable achievement, but it's actually a drop of one place from our pinnacle at sixth place. To help regain that place, why not go to http://homepage.cistron.nl/~ttavoly/rc5/ and pledge your assistance?

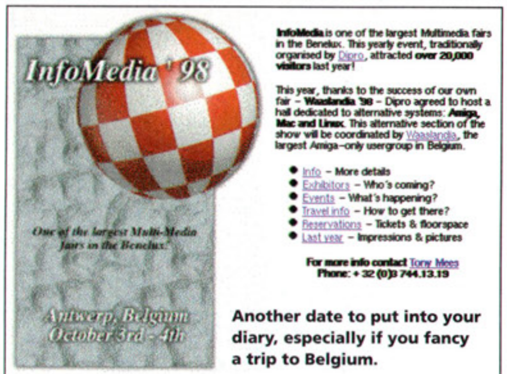


The client can now be run from an attractive MUI interface, making it even simpler to set up.

Belgian Amiga show!

The best-known Belgian user group, Waaslandia, have convinced the organisers of Belgium's largest computer show, InfoMedia 98, that it would be a good idea to have some Amiga attendance. As a result, the biggest Belgian Amiga show has been born.

Entry to the 6,000m², show costs just 250 Bfr. (14Fl./£5/13DM) or 200 Bfr. (11Fl./£4/10DM) for big groups. The organisers hope to have a whole hall filled with Amiga exhibitors, from local shops to international developers. There will be seminars, live IRC conferences and web cams. People who are still unsure about getting online can experiment in the "Cyberzone" which will be set up for that purpose.



Another date to put into your diary, especially if you fancy a trip to Belgium.

Amiga International will have a stand there and will bring Annex, the performers of the *Amiga Theme*, to perform their number. For people trying to find their local user group anywhere in the world, UGN will be on hand to help out.

Waaslandia are planning group trips from all over Europe, so the cost for visiting Belgium shouldn't be too high for the weekend. You can visit their website for more details of what's planned, or for information about how to get to the event, so take a look at: http://titan.glo.be/~waasland/infomedia98.

AIO looks for dep ed

We had a plea from this diskmag that we had to pass on:

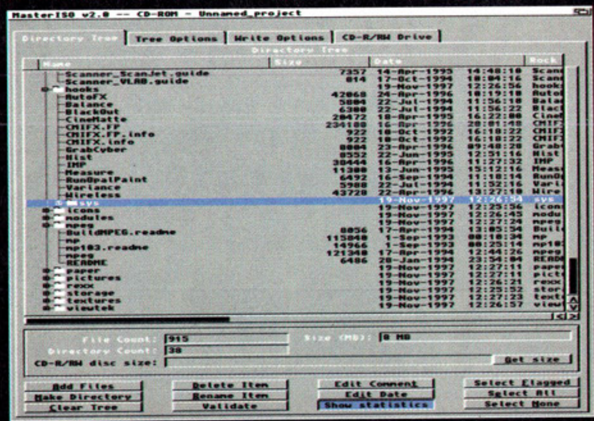
Amiga Information Online is a monthly diskmag which is freely distributable and can be downloaded from Aminet in docs/mags under the name AIOV??.lha. They are currently searching for a new deputy editor and a new utilities editor. If any *Amiga Format* readers think they are up to the job, please contact *Amiga Information Online*.

Email: aio@freedom.usa.com, see http://www.amiga1.demon.co.uk/aio/ or ☎ 0831 37 09 22 (leave your name, number and address if unavailable). Send snail mail to: Lee Hesselden, AIO Editor Application, 8 Plough Green, Saltash, Cornwall, PL12 4JZ, ENGLAND.

MasterISo v2.1 now available

Although essentially a "maintenance update", programming speak for a bug-fixed update of the previous version, the latest version now offers support for the following devices, above and beyond those supported by version 2.

- Hi-Val series of CD-R/RW drives
- HP 7110 CD-RW drive
- HP 7200 CD-RW drive
- JVC XR-W2010 CD-R drive
- JVC XR-W2012 CD-R drive
- JVC XR-W2020 CD-R drive
- JVC XR-W2022 CD-R drive
- JVC XR-W2040 CD-RW drive
- JVC XR-W2042 CD-RW drive
- Memorex CRW-620 CD-RW drive
- Memorex CRW-1622 CD-RW drive
- Mitsumi CR-2401TS CD-R drive
- Mitsumi CR-2801TE CD-R drive
- Panasonic CW-7502 CD-R drive
- Pinnacle RCD-4X4 CD-R drive
- Pinnacle RCD-4X12 CD-R drive
- Pinnacle RCDW-226 CD-RW drive
- Smart & Friendly series of CD-R/RW drives
- Sony CDU-948 CD-R drive
- Traxdata series of CD-R/RW drives



MasterISO now works quite a bit better and supports a lot more drives.

You'll note that this list includes support for the Mitsumi drive we've reviewed in this issue, although we haven't tested this software on the drive yet.

If you're on the net, you can visit the Asimware site at http://www.asimware.com to see a full list of supported drives. If you've registered your copy of *MasterISOv2*, you can download the update free of charge from the website.

New Amos

Although *Amos* has been largely discredited as a development language by Amiga owners keen on the portability of *C*, the tailored attributes of *E* or the ease of use of *Blitz Basic*, the sources to all the variants of *Amos* are now in the hands of some dedicated coders with the aim of bringing *Amos* back as good as new, if not better.

The plan involves two steps. The first is to upgrade *Amos Pro* with these features:

■ EXPANDED/BUG-FIXED VERSION OF AMOS PRO AND COMPILER

All the existing bugs will be squashed (hopefully) and *Amos* will be able to use Amiga *E* symbols and includes. Also, the struct() command will be extended and improved.

■ NEW EXTENSIONS

New versions of existing *Amos* extensions will be incorporated, including GUI, game and other extensions, hopefully including *Amos3D*.

However, even if you have all the extensions included, you still won't have the complete development system that this new version of *Amos* will offer.

■ NEW TOOLS

These will include a GUI-based Intuition editor to allow you to easily make GUIs for your programs. There will be converters to allow you to include *GadToolsbox*-created GUIs in your *Amos* programs, and there will also be bug-fixed versions of the standard *Amos* editors, such as *AMAL*.

■ DEVELOPER INFO

The new *Amos Pro v2.x Developer Kit* will be included, with all the extra tools that were never released in the old versions.

■ TONS OF AMOS MATERIALS

Examples, demos, games, sources and extensions. Basically, heaps of material from the Mushroom PD library (the new official *Amos* library) will be included.

The second step for *Amos* is quite revolutionary. Because the original *Amos* was written in a poor style and was only designed for Workbench 1.3, it isn't really possible to port it across. However, the keen *Amos* users who have the source code are planning to create a whole new *Amos*-compatible programming language that will work on 68K processors, PPCs and the new MMC that Amiga Inc. have proposed for the future Amiga. As such, it will be known as *AmosNG*.

There are no more details of this new package at the time of writing, but you can be sure that *Amiga Format* will bring you all the news as it becomes available.

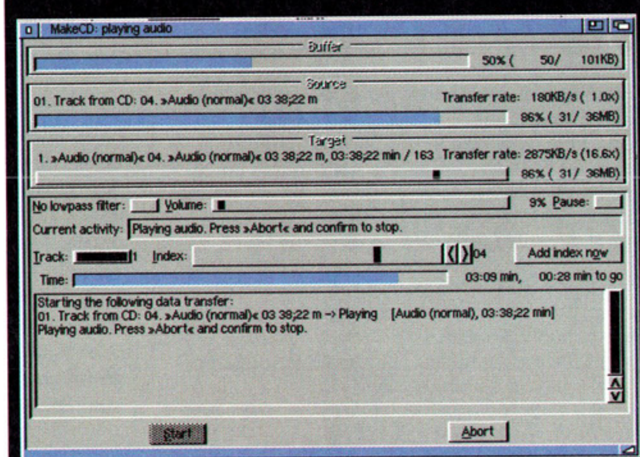
Sequencer One Plus re-released

Epic Marketing are really getting into music in a big way. Firstly, they are re-releasing *Sequencer One Plus*, a MIDI sequencer that promises to be easy to use. They are also stocking the companion product, *The Hit Kit*, which is a collection of arpeggios and bass lines and the like, designed for use with *Sequencer One Plus*.

Epic also have Software Technology's *Samples Series A* set of more than 200 professionally recorded, copyright-free, 8-bit sound samples of real instruments, vocals, etc, all sorted into easy-to-use categories.

Finally, they also have a 3D sound system for the Amiga which can really improve the way your Miggy sounds. For more details on these or other new releases, you can get in touch with Epic: ☎ 0500 131486 or visit their website at http://www.epicmarketing.ltd.net.

MakeCD improves IFF support



MakeCD currently has the best built-in audio features of any CD-R software available.

Although not in the current version of *MakeCD*, as reviewed elsewhere in this issue, the authors of *MakeCD* have said that support for the Amiga's native 8-bit sound format will be included in a future version.

This will give *MakeCD* unsurpassed audio features as it already supports AIFF, MAUD, WAV, MPEG and CDDA formats, and even dynamically converts mono sound formats to stereo tracks when cutting audio discs.

Continued overleaf ➡

AF Net Corner

Some updated websites for you this month. If you haven't visited them in a while, prepare for a nice surprise.

Weird Science

http://www.weirdscience.co.uk

Weird Science have recently revamped their website. Previously, their complaint was that it took too long to maintain it, but now that they have have written an interface linking their product database and their website, the details of their latest products can be updated within half an hour of Weird Science receiving the details themselves.

They have a shopping area with secure transactions so you can use your credit card without fear of some shadowy hacker getting those all-important digits off you and using them to order all manner of naughty things from mail order houses around the world.

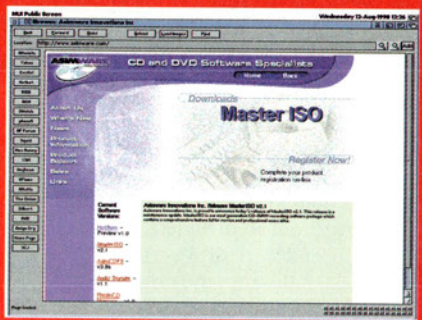


It's safe, secure and now even more up-to-date.

Asimware

http://www.asimware.com

Asimware, makers of *MasterISO* and *AsimCDFS*, have updated their web pages to give a very swish look to what is essentially a fairly simple site. It's still a handy place to have bookmarked if you use either of their packages, especially since updates are available from the site. You can now also register products online rather than having to remember to send in your card.



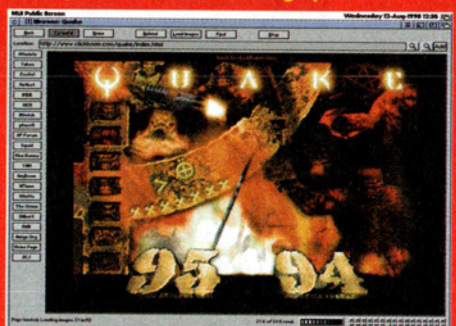
New updates for *MasterISO* are available online.

ClickBOOM

http://www.clickboom.com

ClickBOOM are always revamping their website and it's usually among the best-looking websites targeted at Amiga users. The new revamp is gorgeous, although it does mean a lot of graphics downloading, so access won't be as fast as it would be for a more text-based site.

The front end for the whole website hasn't been changed, but the ones for individual products, like *Quake* (left), have been. The new websites aren't the easiest to navigate, but they sure look good.



Flashy, but watch your phone bill!

Diary

- **Live 98 – technology show**, 24th-27th September 1998. Contact Blenheim Exhibitions (0181) 742 2828.
- **Infomedia 98**, 3-4th October 1998. Contact Tony Mees + 32 (0)3 744.13.19
- **Computer 98**, 13th-15th November 1998, Cologne, Germany. More details to follow.

Reader Projects

You may have noticed this issue that we've included more reader reviews than usual. This is because we are getting loads submitted from you every month. Now, far from from us discouraging you, we've decided to have three categories for reader reviews that you might be interested in.

The first is the Long Term Test, now renamed simply Reader Review. This is for hardware or serious software.

If you think you have something to say about a game you've bought, you should send your review as Reader Game Reviews, and if you've done some DIY on your machine, put it into a tower, taken over your town or created a mind control application with it, anything like that, then send a report on what you've done to Reader Projects.

There are several ways you can send a report in. The first is by email. Send your report, with the appropriate subject line ("Reader Reviews", "Reader Game Reviews" or "Reader Projects") to ben.vost@futurenet.co.uk. You can also send it in on floppy to the usual address: Amiga Format, 30 Monmouth Street, Bath, BA1 2BW, and make sure you put the appropriate subject line on the envelope.

Finally, you can upload it to our FTP server. Send it to ftp://ftp2.futurenet.co.uk/pub/incoming. You won't be able to see your file once it's uploaded, so make sure you name it in the following way: "AF_ReaderReview_INI_DOB.lha", where INI means your initials and DOB means your date of birth in numeric format (03.12.68). That way we can avoid files overwriting one another.

In any case, we'll need your review as plain ASCII text and please don't try to lay it out at all because we'll do that. We'll also need pictures. If you're reviewing a game or a bit of serious software or hardware then we won't need pictures of the actual item because we'll already have them (unless you can do screengrabs). However, we'll still need a picture of you to put in the review.

We'll try not to edit your review, except for length or bad language, so you're free to say what you think of something, whether you think it's good or bad. You have 700 words to tell us, and all the *Amiga Format* readers, what you think, and there'll be a prize for any really good contributions. What are you waiting for?

Competition winners

The following lucky people win a year's subscription to *Amiga Format*, simply for returning their survey details in the last issue. Congratulations also go to **Colin Cannon** from **Callander** who wins a fantastic, *AF*-Gold rated Power Tower. Enjoy!

Scott McManus, Glasgow
S. Costa, Southport
Steve Harrison, Chester
Kevin Hudson, Bristol
Michael Simpson, Ipswich
Stephen Good, London
T. A. Bell, Wolverhampton
Matthew Fletcher, Leicester
Alan Middleton, Burnham On Crouch
Anthony Woods, Helston

For knowing that the Coelacanth was an animal, that Albert Einstein died in 1955 and that Lima was the capital of Peru, the following ten people win copies of the fantastic *Epic Interactive Encyclopedia '98*, which scored a whopping 90% back in issue 112.

Martin Munn, London
Mark Deksyser, Ontario, Canada
Kevin Clements, Twickenham
Ron Hoogenkamp, Gooseberry Hill, Western Australia
Jani Saijos, Vaahtorinne, Finland
L. G. Ottaway, Upper Hutt, New Zealand
Zoe Warren, Tyldesley
R. Stobbart, Bishop Auckland
Gerald Houghton, Irthlingborough
Panagiotis Athanasiou, Athens, Greece.

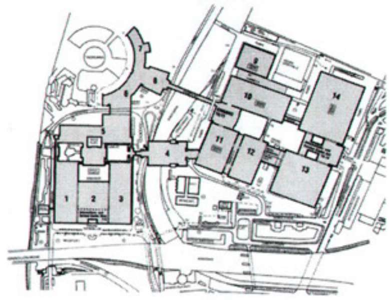
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See our competition on page 19 for a special Wirenet competition and O-net offer!

Taking your First steps On the net

Even those who've been on the net for a while will find stuff they didn't know in **Ben Vost**'s guide to the Internet.

ON THIS MONTH'S CD: AFCD31:-In_the_Mag-/Internet & NETcd2_Lite

Spurred on by the numerous calls we receive every day in the *Amiga Format* offices, we've decided to run another Internet feature. Before you start moaning that we've done it before, well, we know that, but there are enough readers out there who either weren't interested in the net when we ran our feature last May, or didn't know about our excellent guide to getting online to make it worth our while doing another. Over the following pages you'll find a lot of information about getting yourself online with an ISP of your choosing, along with some handy tips for the best ways to save money and keep your Internet action going.

> **"Amiga Format has an email newsletter which keeps our online readers informed of the latest news..."**

To start with, getting online really couldn't be easier. With both *NetConnect 2* and *Miami*, installation is so simple it's funny. For both, all you need to know is your email address or nodename and a phone number your modem will call, and your ISP will provide you with those.

We actually did a side-by-side comparison of getting online with different TCP stacks last year, but now that there are only two of significance (*Termite TCP* in HiSoft's *Net&Web2* pack is no longer produced), and since they both only take a couple of steps thanks to *Miami*'s *MiamiInit* and *NetConnect 2*'s *Wizard*, there's not even any point in doing that.

Take it from one who had to struggle onto the net using the original *AmigaNOS* and *AmiTCP* – nothing could be easier than using either of these packages to get online. It's easier than getting a PC onto the net, and they get all the software and support.

CHOOSING AN ISP

Installing the software is one thing, but how do you decide on an Internet Service Provider (ISP)?

Well, that depends on what you want from the Internet. If all you need is an email address and maybe some personal webspace, pretty much any service provider that's willing to take on an Amiga user will be able to help you out.

However, if it's your intention to offer Shareware software or your services as a landscape gardener from your website, you might want to check out Demon. Not only were they the most



TOP TIPS

■ **If you have a fast Amiga, downloading the Aminet INDEX.Z compressed file is faster than downloading the plain ASCII version. This is because your machine can decompress it faster than your modem can compress and decompress ASCII text.**

Frequently Asked Questions:

1 How much does it cost?

That depends. The usual price is about £10 per month, plus telephone charges. Call it about £20 per month.

2 What hardware and software do I need to get online?

See the "What you need" boxout on the next page.

3 What about ISPs that say they don't support the Amiga?

If you tell them you don't want any support or software from them, ISPs will still usually take your money.

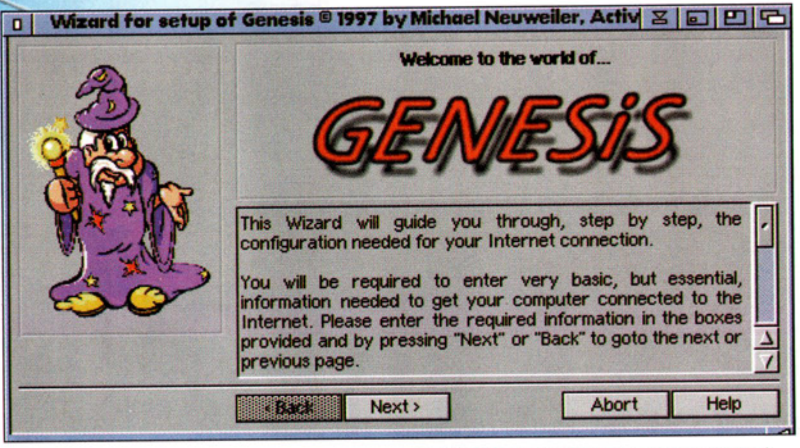
4 £20 still sounds expensive. Is there anything I can do?

Sure. You could find a cheaper ISP or try to get your ISP's POP number (see the Jargon boxout) on your Friends & Family discount plan. If you are with a Cable company for your telly, ask them if they offer Internet access as it's quite often cheaper.

5 How fast will I be able to download?

How long is a piece of string? It depends on a combination of things. There's the speed of your modem, the quality of the phone line into your house and the speed of your machine too.

As a rough guide, with a 33.6K modem you should be able to download at about 3K/sec (about 1Mb every six minutes). With a 56K modem you can usually expect about 4.5-5K/sec, but all download rates depend on what you're downloading, where from and how good your phone line is.



The friendly face of *NetConnect 2's Wizard* makes getting online as easy as falling off a greasy log.

popular provider in our survey, they also allow you a very generous 15Mb of webspace that has two advantages over other ISPs. Firstly, they don't mind what you use it for. You can use it to show off pictures of your baby kitten or to sell motorbike parts, it's all the same to them. Secondly, your website will have a memorable address so you won't end up with something complicated like http://www.blahblah.com/~users/~websites/~sutpea/1285/index.html as your URL. Instead, you'll have a very elegant http://www.yourname.demon.co.uk where yourname is the name of your "node" (basically what your machine is called on the net).

If you really want to have a friendly voice at the end of the support phone line, you could certainly do worse than hook up with Wirenet, the second most popular ISP in our survey. Neil Bothwick, who runs Wirenet, is an Amiga expert and he can help you with any problems you may have with getting online. Wirenet is a bit more pricey if you pay for it by the month, but its yearly rate is very reasonable.

However, if you're on a real budget, perhaps O-net will be more up your street. As a special offer just for *Amiga Format* readers, they're extending their introductory price of just £99.29 for five email addresses and 2Mb webspace forever. That's right: pay once and you never need to pay again. They don't offer 56K service at the moment, but I've no doubt that it will be available by the end of the year. Have a look at our offer on page 19 for more details.

I've mentioned the "survey" that we did a couple of times now, and it's further proof of the usefulness of the Internet. *Amiga Format* has an email newsletter which keeps our online readers informed of the latest news much faster than we can in print. I used it to ask for help with this feature, finding out what ISP real Amiga users

Continued overleaf ➡

What do you think?

Net quotes from AF Readers

"I would like to recommend Demon as a brilliant ISP."

Simon Finnigan

"I would recommend ClaraNET to other Amiga users, but the drawback is that you have to search for your own software. I suppose nowadays this would be a common occurrence with many ISPs."

Simon Parry

"I'm using Which Online with my Amiga and so far there have been no problems."

A. Hale

"Putting my Amiga onto the Internet was like opening a door to a new world and being part of it."

Andrew Fitzgerald

"Demon's service is great. Had a few probs at first, but their 24-hour helpline (who even called me at home) was second to none."

Andy Gibson

"I would love free phone calls."

Andy Kinsella

"I have always found [Zetnet] helpful and friendly and I wouldn't change from choice – they are also probably the cheapest. I would NOT recommend Virgin – no support for the Amiga, don't want to know and stupid with it."

Ian Aisbitt

TOP TIPS



■ PPP is faster than SLIP to get your modem onto the Internet. Make sure you use PPP in your TCP stack.

■ If your copy of *YAM* locks up and you use *Miami*, make sure you have "Down when offline" checked in *Miami's* preferences.

What you need:

Hardware

A HARD DRIVE:

It isn't really possible to get online without one, and you certainly won't be able to use the net in any useful way. Both email and browser caches are the main culprits for using space on your hard drive, but even with the amount that I use the net every day, my Internet directory as a whole still only comes to 45Mb.

A MODEM:

Any speed is suitable for email use, but the faster the better for things like FTP or the web. Even 56K modems aren't expensive these days.

Talking of which, you need to know about the two different 56K standards. There's x2, which isn't very popular in this country and is mainly found on USRobotics modems, and there's k56Flex, which is found on pretty much everything else and is very popular.

By the time you read this, everything may have been resolved by v90 anyway. v90 is the new, all-encompassing 56K standard. All ISPs that currently dither between x2 and K56Flex will support v90.



Pretty much any modem is suitable, but the faster the better.

A FAST SERIAL PORT:

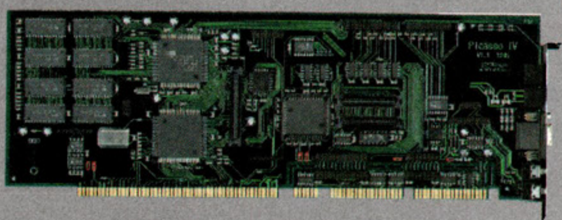
This isn't a necessity but it will certainly make browsing the web more pleasurable as the Amiga's built-in serial port has to pass a lot over to the processor to deal with. A third party one doesn't have to, leaving the processor to get on with decoding images and the like.

MORE MEMORY:

While you can be on the net with only 4Mb of fast RAM, things are a lot more fun if you have more, and a fast processor to go with it really helps.

GRAPHICS CARD:

This is one thing that really helps web browsing. If you run your browser on a true- or high-colour screen, it won't need to do any dithering, thus making web browsing much faster and prettier.



Graphics cards like the Picasso (left) will speed up your web browsing no end.

Software

TCP STACK:

This is the core essential bit of software. Without a TCP stack you can't get on the Internet at all. *Miami* is available as a demo version on the CD this month, but a better bet for the beginner would be a complete suite of software, especially *NetConnect 2*, which, surprise surprise, we've also put on our CD for you. *NetConnect 2 Lite* contains all the following bits of software.

EMAIL CLIENT:

Something to send and receive emails with. If you end up with one of the free email services, they are often based on the web, so you won't need a separate email program. The best one (and the most popular) is *YAM*, also on our CD.

WEB BROWSER:

Voyager, *iBrowse* and *AWeb* are the three best-known web browsers for the Amiga. All of these are available in useable demo versions on our CD every month, and can be found in the +System+/Tools/Browsers/ drawer.

FTP CLIENT:

A tool to enable you to download files from Aminet, amongst others. *AmFTP* is probably the best-known and most comprehensive, although DOpus' support for FTP is also very good.

IRC CLIENT:

A tool that allows you to chat on the Internet, but you'd better be a fast typist. *AmIRC* is the best.

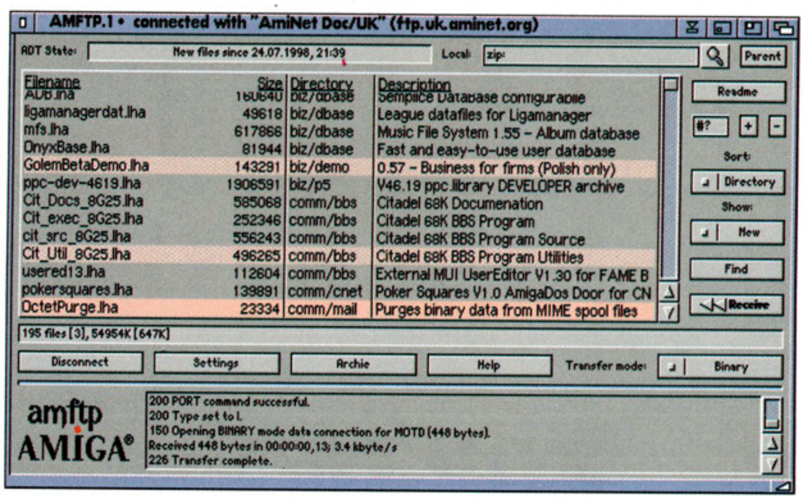
NEWS CLIENT:

Something to allow you to peruse the rambling of the Usenet crowd. *MNews* is highly recommended, but you can also use *Voyager*.

favoured, what TCP stack, what email program and what they used to browse the web. It turns out that *Miami* is the most popular TCP stack with more than half the votes, followed by *AmiTCP* – we haven't discerned between standalone *AmiTCP* and either version of *NetConnect*, just as we haven't made a difference between demo versions of software and full versions, hence *Miami*'s popularity, I think.

YAM is the clear winner in the email package stakes, with nearly two

The best-known of all the Amiga FTP programs, *AmFTP* is a cut above the rest.





TOP TIPS

■ If you want to save some money, you can whip through a site like The Onion (http://www.theonion.com) online, making sure that everything has been loaded on each page, then get yourself offline. If you then reload your browser you should be able to load those pages from the cache. This is generally a good move for any site that takes longer to read than download.

YOUR ISP:

WHAT YOU CAN EXPECT FROM YOUR ISP:
- At least one email address
- Web space
- Local dial-up call rate

WHAT YOU CAN'T EXPECT FROM YOUR ISP:
- An 0800 freecall dial-up number
- Amiga support (in 99% of cases)
- Free service (see the Freebies box)



TOP TIPS

■ You can make a bob or two from your website by pointing people at sites that sell the products you are talking about or reviewing. You can get more info on this topic by reading Dave Cusick's thoughts on the matter in last month's *Amiga Format*, but also have a look at http://www.bookpages.co.uk.

FREEBIES

You don't have to pay for all your online services. BT are talking about offering a kind of ISP-less online existence where you use your modem to dial into a BT POP at a premium rate, possibly something like a penny a minute over the normal local call rate for the time you call, and you're online. You don't get any services like email or web space, but thanks to the numerous free services that there are once you're online, this probably won't matter. If you want an email address, go to http://www.yahoo.com, http://www.bigfoot.com or any of the other free email services. If you want webspace, go to http://www.geocities.com or the like.

The only problem with these free services is the fact that you don't always get what you want by way of an email account name or a website address. If you can cope with being "ben37562954@hotmail.com" or having the URL "http://www.geocities.com/siliconvalley/~3264/index.html" (these are both just examples, by the way), then so be it – you can be online for (almost) free.

thirds of the votes, but *Voyager* and *iBrowse* tie for web browsing and even PC and Mac browsers are more popular than the non-MUI-based *AWeb*.

NOW IT'S YOUR TURN

The data gathered from our readers has proved useful to the magazine, but the same is true of data you might want. As an example, how often do you look at a bit of software on our CD and it crashes your machine? How often do you use a bit which is good, but you'd like to have an extra feature? How often have you wanted to send money for Shareware, but haven't dared send it "blind" in an envelope? What if you're having a problem with your machine and you don't know what to do about it?

Being on the Internet means that you have a solution to all these questions and more. You can email authors to find out what the problem is, make suggestions to improve the software further, check to see if your payment has arrived, and this is without pointing out that the net is full of the most helpful people you could wish for.

WARNING SIGNS

People may warn you about things like flame wars, mail bombings and other things that sound like they ought to be in a high-octane movie about the dangers of terrorism, but as long as you pay attention and explain that you're new to the net "scene", you'll find a queue of Amiga net users lined up to give you a helping hand.

What do you think?

Net quotes from AF Readers

"I find Demon offer the best and most comprehensive service."

Ash Thomas

"I'll buy NetConnect 2 when it is available here in Denmark. I can't wait."

Casper Thygesen

"If you access USA sites a lot then Demon are very quick."

Paul Dale

"UKOnline have an excellent Amiga support line, but I think the number of people abusing the free trial have slowed its performance."

Gus Haines

"I use the NetConnect package (2 will be here any time soon now). It really is great."

Duncan Richardson

"Globalnet are fast and reliable but their email and webspace are less than those of other providers."

Gareth Murfin

"I can't really comment on the technical support from Wirenet because I haven't needed any. I connect first time 99% of the time and have no complaints."

Graham Robson

A QUESTION OF NETIQUETTE

Any discussion of being new to the Internet wouldn't be complete without a discussion of what exactly "netiquette" is, but to be honest it's really just common sense, like being polite and reading the "Frequently Asked Question" files (FAQs) that you can ask for on mailing lists or websites.

The most important thing to bear in mind is that the Internet is a fairly casual place. Most people are pretty laid back about being asked what might seem to you to be basic questions. After all, everyone has to start somewhere.

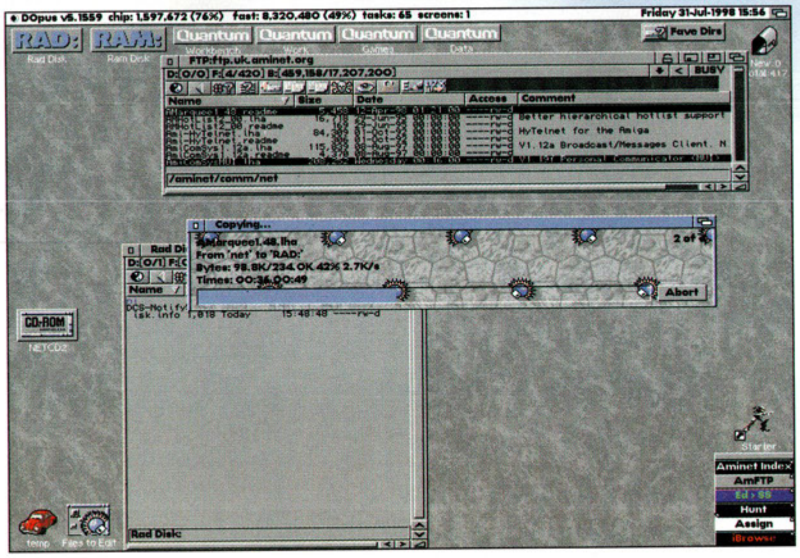
I realise that I've just made it sound like you'll be flummoxed, flabbergasted and confused by the Internet, but it's not true. Sure, if you just dive in and spend days on end on the net then you might end up getting so confused about what you're doing that you want to give up immediately. However, that won't happen because there's this handy pressure valve known as a phone bill to make you more cautious.

EASIER THAN EVER

It actually gets harder to write introductory features about the Internet as time goes by. It's not because there's nothing to write or any way to present the Internet in a new or exciting way – the problem is that it's too easy now.

I used to be able to go on for pages about the perils of not setting up the right DNS servers in your config files, but now all this is done for you. Fortunately, we can ride on the back of the mainstream, taking full advantage of things designed to make the average PC owner's life easier. There's no need

Continued overleaf ➡



DOpus's FTP support is very good. It treats the FTP directory just like a local lister. The next version will even offer Aminet readme's as comments.



TOP TIPS

■ It has been said before, but putting your mouse over something you don't understand in a program and hitting the help key will usually bring up the online help at the right place. This is true of all modern programs, but it's very common in Internet packages.

to worry about all the things that originally made getting online a tough business. Does it sound easy enough now?

IT STILL COSTS TOO MUCH

So the only objection you can possibly have to getting online now is the very real one of cost. It's true that having a modem is a big temptation, especially if you yearn for the company of other Amiga users, but it can be quite a cheap proposition. All ISPs worth their salt now offer local call access to their services so it doesn't really matter how geographically isolated you are.

BT and Cable and Wireless have deals whereby you can reduce the cost of calling certain numbers, and cable TV companies often offer cheap telephone services too. Even so, it can still seem quite expensive.

A CHEAPER OPTION?

BT are currently proposing to introduce an ISP-less connection to the Internet which will get rid of the subscription charge that most online Amigans pay every month.

If this comes through then it's likely that you'll only pay slightly more than you already do for a local call to get online. The other thing to bear in mind is the fact that in these days of increasing Amiga isolation, getting online presents you with a world of interesting people to supplement your monthly visit to your local (or not so local) user group, or newsagent for your latest copy of *Amiga Format*.

You can also play an increasing number of games online, such as *Quake, Doom, Abuse, Foundation* and so on. Not only that, but you can steer the way game development is going and even help with their creation.

If you program then there's no better way of getting good beta testers and people to translate your program into all the languages of the world, although English is the lingua franca of the Internet.

IN CONCLUSION

There's loads of helpful advice dotted around these pages (although you'll get heaps more online) and ISPs can be found in any copy of our sister mag *.net*, so take the plunge and get yourself online – it's well worth it.

What do you think?

Net quotes from AF Readers

"I have been very pleased with Enterprise and have never had any major problems with my connection."

James M. Davies

"For an Amiga-friendly ISP, I recommend Wirenet whole-heartedly."

Martin Osborne

"For Amiga users who want to use Aminet, [NetcomUK] also have a direct line to Imperial College for faster downloads."

Mike Barlow

"For newcomers to the Internet, I wouldn't recommend Enterprise."

Oliver Roberts

"One thing that amazes me is the modest hardware required to be fully active on the Internet. I did email and minimal web-browsing on an '020 with 4Mb fast RAM and it worked well (enough)."

Paul Roberts

"I cannot recommend the Netconnect package enough..."

Richard West

"The net is a good place to have open to you. If you have a problem of some kind then there will most likely be someone who can help you."

Simon Jenkins

"I have had no problems with Wirenet and find their service to be very good. I've only got one real question – when does Neil Bothwick sleep?"

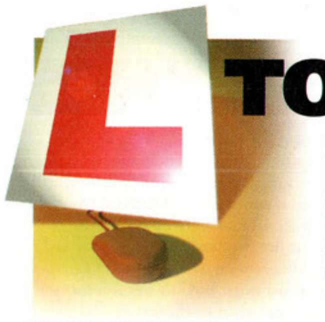
Ian Urie

"I have found [UKOnline's] Amiga service to be excellent."

James Lowe

Getting onto the net gives you access to all sorts of useful information, along with new people to talk to.





TOP TIPS

Rather than checking to see if your favourite page has been updated every time you go online, use a service like Netmind (http://minder.netmind.com/) instead. It sends you an email if the pages you ask it to keep track of change.

WTF's it mean?

In common with all the other Internet features, some effort must be made to explain some of the many jargon and acronym terms you'll come across while browsing the net:

ISP:
Internet Service Provider.

RTFM:
Read The Flipping Manual – often said to people who ask questions that have obviously been answered in the aforesaid tome.

ROTFL:
Rolls On The Floor Laughing – usually posted in response to something witty or just downright dumb.

TLA:
Three Letter Acronym – used mainly when someone is using too many abbreviations.

:-) and :(
or many variations on the theme. These little punctuation explosions are known as "smileys", or more pretentiously as "emoticons". There are a whole mass of them. If they don't mean anything to you, try tipping your head to the left and seeing them as smiley faces. You can find huge lists of different smileys on the Internet.

POP:
Point of Presence – where you dial into your ISP. This should not be confused with POP3.

POP3:
Post Office Protocol 3 – a means by which your email gets transmitted. Most ISPs use this method for email these days.

SMTP:
Simple Mail Transfer Protocol – an older alternative to POP3. You'll use it for outgoing mail.

FTP:
File Transfer Protocol – you can use an "ftp client" (a program on your machine) to download files from the Internet with this protocol.

HTTP:
HyperText Transfer Protocol – the method by which web pages are viewed over the Internet. A protocol is simply a method by which these things happen. Don't worry about it.

This is just a very small sample of the many acronyms in use on the net. Don't worry about committing them to memory or anything because you'll be using them so often that you won't even have to think about what they actually stand for as you'll just what they mean.

AF Special Offer!

As a very special offer to *Amiga Format* readers only, O-net, a new ISP, will give you their introductory rate for subscribing to their service. As you can see from the details box, this rate is a one-off payment. That's it. You'll never have to pay another bean for your Internet service (except, of course, for your phone bill). You can use it with our special demo of *NetConnect 2 Lite* that you'll find on our CD in the -In_the_mag- directory. O-net don't normally support Amiga users, but our special deal also incorporates telephone and email support from those good guys at Active Technologies.

- One-off payment – no monthly or yearly charge
- Five email addresses
- 2Mb webspace
- Only £99.29!

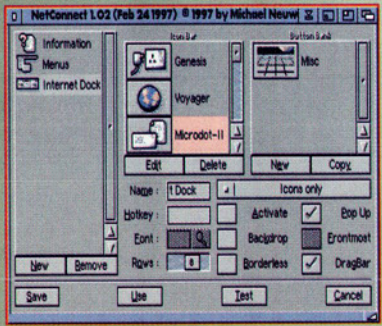
ONET

WIN! AF Competition!

All you need to get online for a year!

1st Prize: One year's free subscription to **Wirenet**, a **Pace 56K modem** and **NetConnect 2**





The *AF* Gold-rated Pace modem (left) and the equally fantastic *NetConnect 2* software.

Runners up: 3 month's free subscription to **Wirenet** and a copy of **NetConnect 2** for two people.

Just answer this simple question:

What do the initials ISP stand for?

WIRENET AMIGA INTERNET

COMPETITION RULES

1. Employees of Future Publishing and Power Computing are ineligible for entry to this competition.
2. No correspondence will be entered into.
3. Winners will be selected at random from all correct entries received by the closing date.
4. Entries must be received by October 28th, 1998.

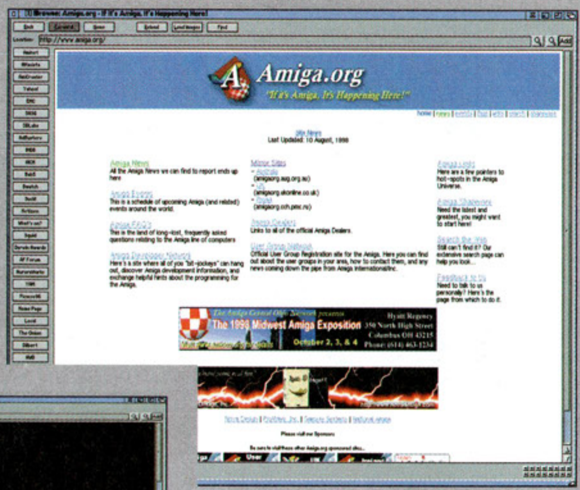
Send your completed entry form to:
ISP Competition,
Amiga Format,
29 Monmouth Street,
Bath, BA1 2BW.

Top Web Sites

So now you're on the net, where do you go to first? As any experienced websurfer will tell you, you can spend hours online and get nowhere, so here's a list of some of the sites we think you should put into your hotlist immediately.

General

These three Amiga should be first on your visitation list every single time you go online.



AMIGA ORG

http://www.amiga.org

Not updated quite as regularly as the Amiga Web Directory, it is nonetheless very useful for other stuff and the website for Amiga.org should also be on your daily visit schedule.



AMIGA WEB DIRECTORY

http://www.cucug.org/amiga.html

The Amiga Web Directory is the first place to stop off when you go online. The new links page is invaluable and its search facilities are a lot more targeted than using a search site like AltaVista.



SQUID'S HOME PAGE AND RUMOR MILL

http://users.compassworks.com/~squid/amiga/amiga_articles.html

Where to go to get the latest scuttlebutt or chat on the influential forum Moo Bunny, where you'll find all manner of Amiga dignitaries.

Software

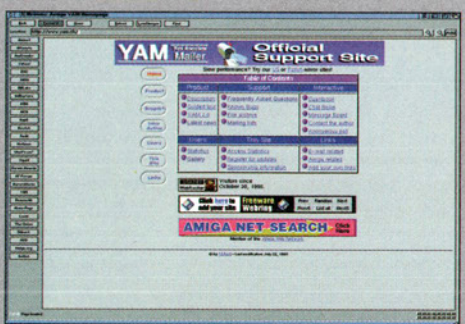
For the latest net software for your Amiga, make sure you've got these sites in your hotlist.



The site for Vaporware products such as *Voyager* and *AmFTP*, this should be on your list of handy places to visit.

VAPORWARE

http://www.vapor.com



YAM

http://www.yam.ch

The website for the most popular Amiga emailer. This is the place to go to get the very latest version or to add your mugshot to the gallery section for other users to download.

Gaming

If you're a keen Amiga gamer, eager to hear the news, you should definitely bookmark the following sites:



AMIGAFLAME

http://www.amigaflame.co.uk

Amiga Flame is probably the best-known Amiga games site going. Despite the poor spelling and grammar, Philip Cosby's site is well-attended and contains its fair share of exclusives.



AMIGA NUTTA

http://www.nutts.demon.co.uk

David Flaherty's site isn't quite as well-known as Amiga Flame, but it certainly deserves to be.

Taking more of a magazine format than AmigaFlame, David promises an update every two weeks with letters, surveys and the like.



TEAM GOIGOI

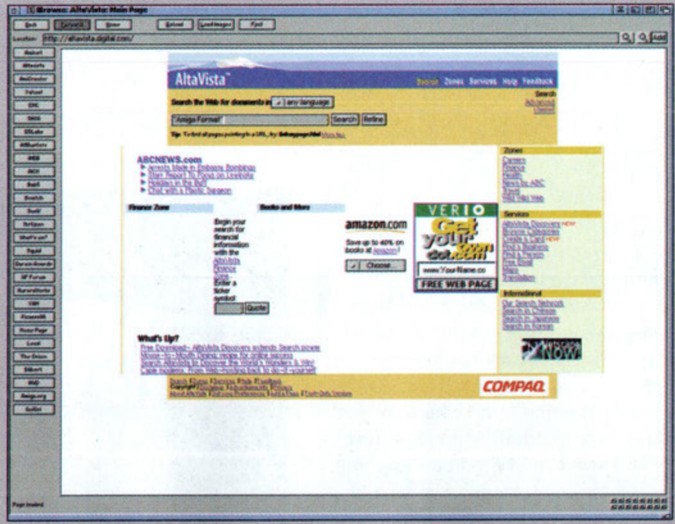
http://www.goigoi.com

If you're an online *Quake* fan, you'll certainly want to know about Team GoiGoi. Their impressive-looking site will offer you Deathmatch levels and hints and tips for getting the best from *Amiga Quake*.

Search Engines

For searching out topics of interest to you and yours, your best bet is to get to a search engine. There are two types of engine – hand-created catalogues such as Yahoo, and robot searchers which simply whizz around the net, collecting addresses. Both have their uses and I've noted the differences below.





YAHOO!

http://www.yahoo.com

This is the original catalogued site. There are even localised versions for different countries. If you're looking for a particular service in this country, we recommend you use http://www.yahoo.co.uk

ALTAVISTA

http://altavista.digital.com

Whereas this site is the mother of all robot search engines. Don't be surprised if you come up with 300,000 responses to your search as it's not uncommon – you'll just need to refine your keywords somewhat.

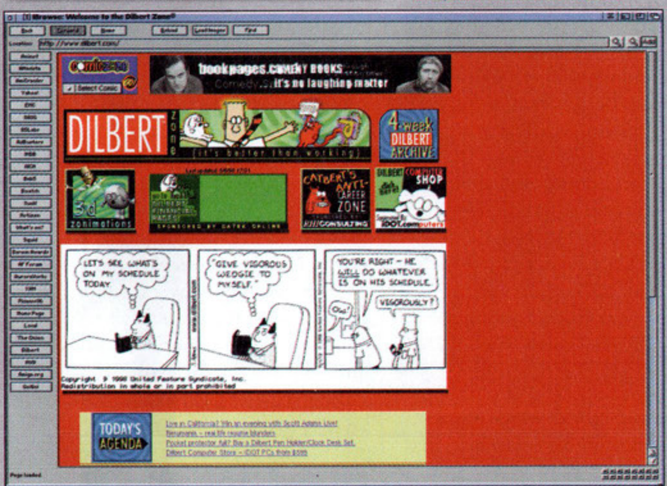
OTHER SEARCH ENGINES:

There are too many to count, but try http://www.excite.com, http://hotbot.com or http://www.lycos.com

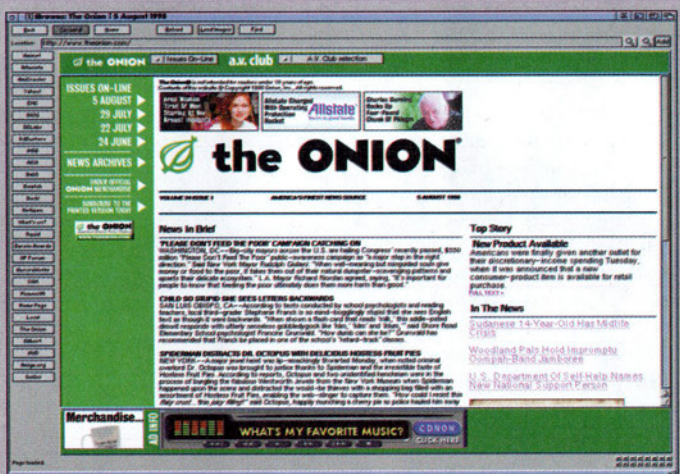
Other Stuff

DILBERT ZONE

http://www.dilbert.com



If you work for a technology company in any kind of technical area, or even if you're just a bit computer literate, you'll probably appreciate Scott Adams' sense of humour. There's a new cartoon every day, making this another essential daily stop off on the web.



THE ONION

http://www.theonion.com

An American spoof newspaper that comes out once a week. It's content is decidedly grown-up, so it might be worth checking with your parents for content if you're young enough to need consent.



INTERNET MOVIE DATABASE (IMDB)

http://uk.imdb.org

The Internet Movie Database is a superb resource, detailing anything and everything to do with movies. It's cross-referenced fully so if you want to know who was in *Raiders of the Lost Ark* and *Alien* (Ron Cobb did the production art for both) you can find out easily.

AIN'T IT COOL NEWS

http://www.aint-it-cool-news.com

Harry Knowles' site has gained an infamy in the real world that is belied by his site. Amateurish-looking, yet filled with news from Hollywood that you've never heard before, it's an easy way to keep ahead of all the Barry Norman's in your life.



Look, up in the Sky

So you have your digital camera connected to your Amiga. What next? John Kennedy clearly has too much free time.

Now that connecting digital cameras to your favourite computer is becoming more commonplace – there are plenty of software utilities to choose from, both commercial and free – Amiga owners can try to find some more exciting things to do with them.

What's the first thing which springs to mind after purchasing an expensive piece of hardware like a digital camera? Why, suspending it from a kite several hundred metres in the air, of course.

Even a relatively low flight will provide you with a completely different view from the ground, and as most cameras have wide angle lenses, the results are even more extreme.



It's padded and ready for action. The DC25 is an ideal unit to use, mostly because it isn't very expensive if you're a poor pilot.

> *The DC25 has a self-timer which makes it possible to launch, take a picture and land without any extra hardware.*

THE CAMERA

Digital cameras are the ideal image capturing device for attaching to kites. They're light, easy to use and lack any form of sophistication, such as focus or exposure controls. Best of all, you can rush the camera home to your trusty Amiga and see the results of your work within minutes.

Believe me, you'll take a lot of dud images as you learn the techniques. I have dozens of pictures of grass and another dozen of blue emptiness.

For various reasons (alright, cost) my favourite digital cameras are the Kodak DC20 and DC25. Sadly, neither model is currently in production any more, although they are available if you look around. You could try our free reader ads, and the Kodak website also has some pointers to obtaining "re-conditioned" units very cheaply.

The DC25 has a self-timer which makes it possible to launch, take a picture and land without any extra hardware. A word of caution, though: get someone to help you. The self-timer period is short and once you set the kite up and trigger the shutter delay, you have to run like mad to get back to the strings and haul your kite into the sky.

It's very much a matter of pot luck what the camera will be pointing at when the shutter goes, and you might also want to wear a helmet. On at least one occasion I nearly knocked myself unconscious when I tripped and landed on my head while running backwards pulling the strings.





Most of your shots may well end up like these above, but some will be stunning.

Sadly, the DC25 is really too heavy for successful aerial photography. With it attached, the kite would only stay aloft in gale force winds and it actually broke the carbon fibre kite spar when landing. Carbon fibre splinters are dangerous and I think I still have one embedded in my left index finger.

A lot of the camera weight can be attributed to the two batteries and LCD screen, which probably also makes the DC25 a lot more fragile.

For these reasons, the entry-level DC20 is much better. The DC20 weighs almost nothing and uses a single battery which keeps the weight down even more. The bad news is that the DC20 doesn't have a self-timer and so we need



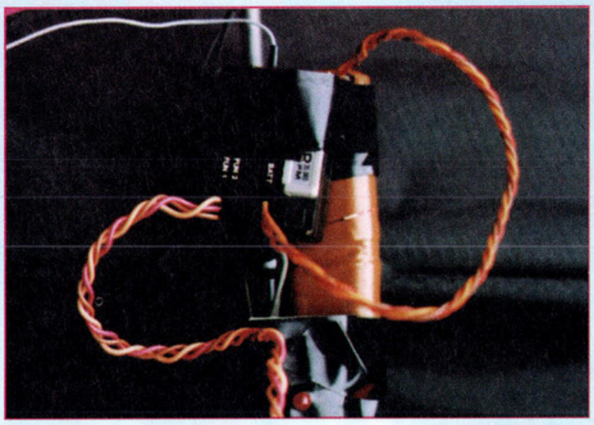
THE KITE

It's not really fair to expect any old kite to work well with a project like this. You need a kite which has a good lift capability, is reasonably strong and is also very manoeuvrable. A twin-line delta-style kite is probably your best bet, and in this experiment we used a Spectre Club kite. Kites are another one of those hobbies you can quickly spend a lot of money getting involved in, and it's hard to class something like the Spectre as a toy. It might be worthwhile scanning the skyline for existing owners and then talking them into helping you out. You'll also need good strong line and a sunny day with a steady, strong breeze.

As your kite will weigh more than usual, be extra careful to avoid flying near power lines or civilians.



No, it isn't an angel, it's a lovely young lady holding a kite.



to find some way of triggering the shutter remotely.

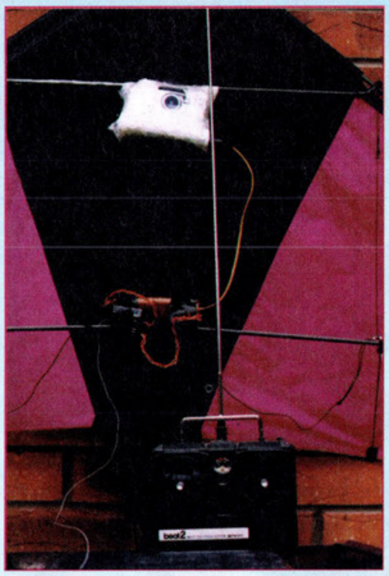
Some high tech PIC-based wizardry and an RF receiver with dangly aerial are connected to the kite. The camera is then activated by remote control.

TRIGGERING AND MOUNTING

It's possible to force the DC20 to take a picture by sending a suitable serial signal into the 3.5mm jack connector normally used to download images to the Amiga. Obviously, attaching an Amiga to the kite isn't a realistic option: even though an A600 is small and expendable, it still needs to be connected to the mains power supply.

The answer is to use remote control via radio. The RC systems used in model cars, helicopters and planes all work in a very similar way: a transmitter sends an encoded signal (using PWM) over the FM band to the tiny receiver circuit in the vehicle.

The receiver has outputs which can directly power small servo motors that are used to alter the steering, move flaps, open the throttle and so on. All that's needed is a small battery back to power the receiver. Only a single receiver channel is needed, so an RC



car system is more than adequate. If you already own a remote control plane or helicopter then you can utilise any spare channels you already have.

RC and digital camera nut David



Grenewetzki has designed a small circuit which connects directly to a standard RC receiver, decodes the output and triggers the DC20 camera. The circuit uses the now-familiar PIC device (see recent *AF*s for features on using and programming PICs) to perform various other functions, such as driving an indicator LED and keeping the camera from automatically switching off by sending out "keep awake" signals.

The circuit is available in pre-built or kit form directly from David and, although based in the US, he's happy to supply worldwide. Visit his website at http://www.wco.com/~dgreno for details.



The picturesque seaside (that's the blue bit in the distance) resort of Bangor, Co.Down, as photographed from the air.



Mounting the camera and RC circuitry to the kite is a matter of experimentation. The camera should obviously be protected in some way and a small amount of bubble-wrap seemed the best bet to me, and it has prevented any damage so far.

Try to avoid upsetting the balance of the kite by trying to spread the load, although you should still try to keep everything as close to the centre of the kite as possible. See the pictures on these pages for our solution.

More advanced aerial photographers who use real 35mm cameras (and larger kites) build special cradles which are suspended beneath the kite's super-structure. I found that placing a small plastic tube over the central spar and attaching the camera to this, therefore allowing it to swing freely and so sit generally in-line with the horizon, produced the best results.

In the future, I think I might try attaching a servo motor to try to steer the camera so I'll be able to point it in particular directions.

SMILE, PLEASE!

Getting good pictures from an aerial camera takes practice, and if you look at David's website you'll see some spectacular examples. My own modest examples are included hereabouts. Once you get a working system, you should try taking pictures of your neighbourhood, local town or even some famous landmarks.



With a following wind and some persistence, you too can take aerial shots of your home like this. Watch out for the trees, though.

Remember, a kite just happens to be the easiest and cheapest way of getting a camera up into the air. If you or a friend are already into RC aircraft then you have the perfect vehicle.

Again, the DC20 coupled with the PIC-based RC trigger circuit is the best way to take pictures. Happy flying!

Towering up an A4000

Reader Projects

Thinking of towering up your Amiga? Simon Brewer already has, and he's got some invaluable advice.

There are many reasons to tower up an A4000, the main one being the space (or lack of it) for extra CD-ROM drives and hard disks, as well as the fact that the A4000 only has four Zorro slots. It's a big job and it's probably harder and more complex than putting an A1200 in a tower.

I ordered my tower from MicroniK via Blittersoft. The box it arrived in hinted at the size of the thing – 2'6" high, 1'6" deep and 7" wide. The tower comes with six pages of photocopied instructions which have been translated from German. Unfortunately, they're littered with typos and some amusing spellings, such as 'whole' for 'hole'.

The instructions are also incorrect in a few places, and as a result I wasted a few hours re-doing parts of the construction in a different order.

GETTING STARTED

The first thing to do is to find a large work surface that you can tie up for a day while assembling the thing. I grabbed the dining table and covered it with some thick bath towels to protect it.

Then I had to disassemble my A4000 right down to the motherboard. Make sure you take anti-static precautions, such as touching a radiator, as there is no easy way to replace your A4000 motherboard. Dismantling the Amiga is quite easy – just undo all the screws and take out the drives and power brick.

> "...take anti-static precautions, such as touching a radiator, as there is no easy way to replace your A4000 motherboard."

Taking off the plastic front is really a two person job because of the eight split clips which are used. The Zorro bus board needs a bit of careful force to ease it out of the motherboard.

Once everything is out, store it to one side while preparing the tower. Remove the six screws from the back and take off the metal casing. Remove the four screws which hold the 3.5" drive bay and slide it out. Lay the tower on its right side. Lay the insulating plastic (which was beneath the motherboard in the desktop case) inside the tower and slide the motherboard into place so that the connectors fit through the cut-outs on the back of the tower.



The completed tower contains a very impressive system and it certainly looks the part too.

It's a tight fit but you can angle the board into place and ease it down. Fix it into place using the screws provided (two of them are metal supports for the bus board). Connect up the cables to the LEDs and the lock and attach them to the motherboard.

The mouse and joystick ports are connected to extension cables that lead to new ports at the back of the tower. I also attached a three-socket plug and cable to the three pins which stick up from the rear of the motherboard. These pins allow you to mix another audio device with the Amiga's own sound output.

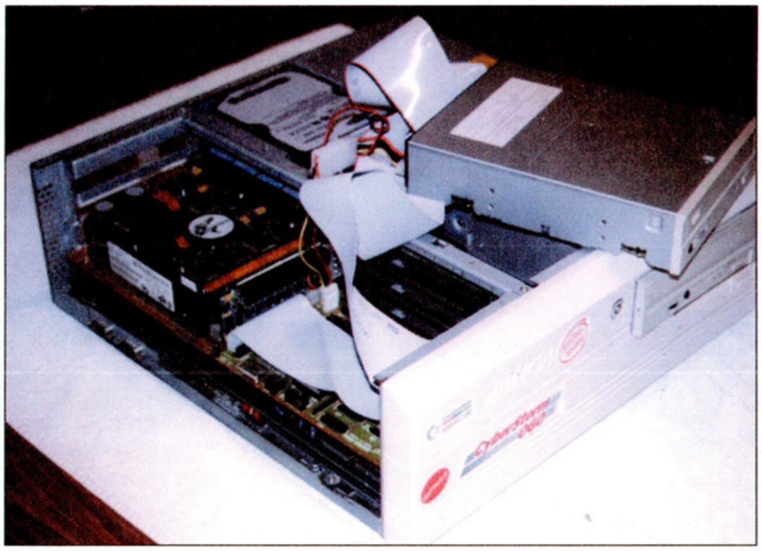
Now grab your processor board and clip it securely into the CPU slot. If you have a CPU which has on-board memory SIMMs, upgrade them while you have a chance to. Taking the CPU board out again is very tricky later on. The same applies to the motherboard RAM – fill up those slots to their full 16Mb now.

BUS BOARDS

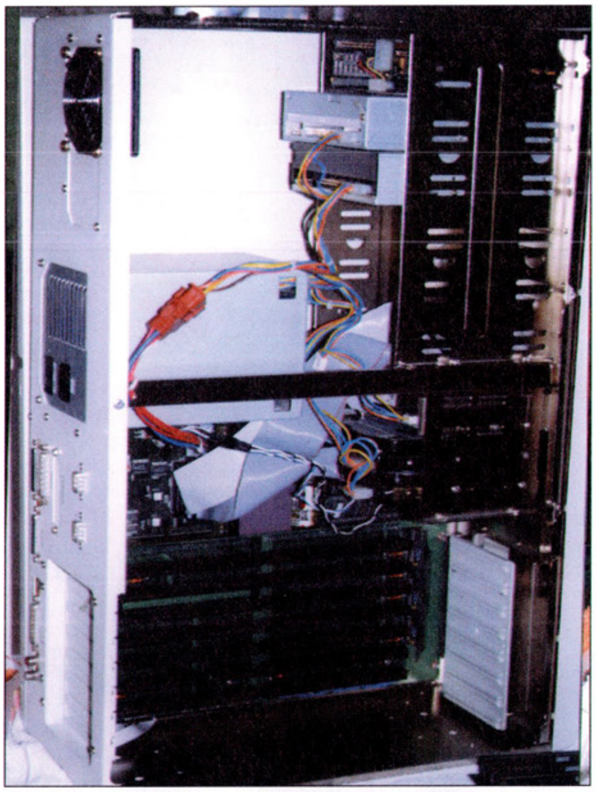
Now for the bus board. This is where most of your £300 went. It slots into the motherboard with a little force. Screw it down, making sure you use the red insulating washers where indicated on the MicroniK instructions.

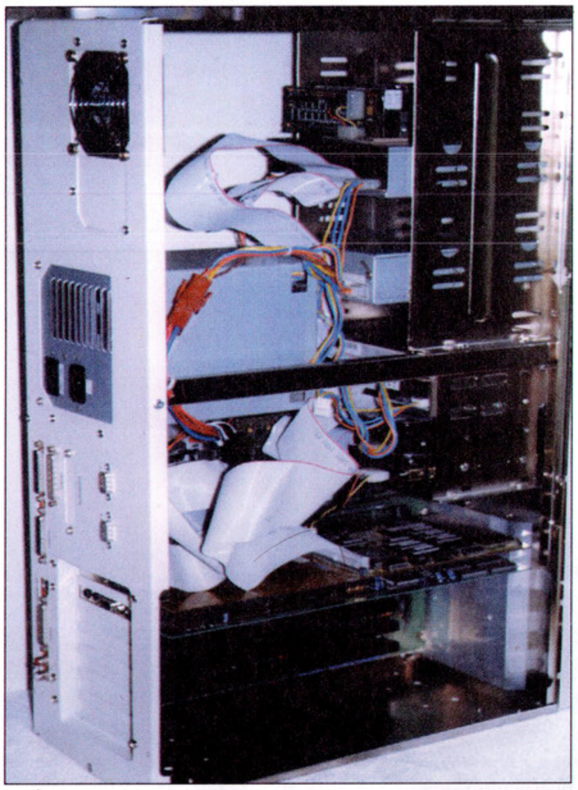
The next step is to get a Zorro card to see if it will fit. Mine didn't as the supporting slots at the front of the tower were almost a centimetre too far in and the board just wouldn't fit. I took off the support (which means dismantling the whole front of the tower) and insulated the metal with some more clear plastic sheeting. You might be lucky and get slots which are in the right place.

Disregard the MicroniK instructions at this point. Instead of putting your power brick in the tower, fill up the 3.5" drive cradle with your hard disk(s) and floppy drive. I fitted my two IDE drives and my Lightwave SCSI drive into the bottom of the cradle. Twist off the two pieces of masking metal on the front of the cradle. Aligning the floppy drive with the third row of screw holes from the top will allow you to later mask the hole in the tower façade with the rectangular piece of grooved plastic from the front of the A4000 desktop casing.



The desktop A4000, obviously overflowing and in need of rehousing.





The tower with the Zorro slots and power brick installed (above) and with the cards and drives connected (above right).

Turn the tower upright. Sliding in the cradle requires some force as the top lip needs to slide along the runners midway in the tower and under the 5.25" bays. Screw in the cradle with the four screws you removed earlier. It is possible to fit in the grooved plastic mask from the desktop case by wedging it in place above the floppy drive.

POWERING UP

Now you can put in the power brick. Included with the tower kit is a wedge-shaped plastic bracket which needs to be attached to the bottom of the power supply. Once this has been done, the power supply is held inside the tower with two screws in the actual brick and two screws in the plastic wedge.

Although it doesn't look very safe, it works and the brick can't fall. If you want to, you can drill another hole in the back of the casing and put another screw into the brick to be extra safe.

In order to allow you to turn on the Amiga from the front of the casing, a plastic rod is fitted from the button to the push-switch on the power brick. The rod may need to be trimmed down a bit so the Amiga can be turned off again (I had to cut about 5mm off it).

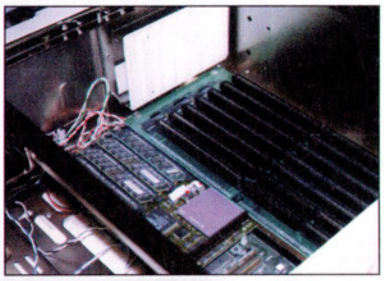
> *Check everything, then check it all again to make sure before turning the Amiga on. It should boot up as normal.*

The rod is then slid into the button and slotted over the push-switch. A plastic collar slides over the slot and holds the rod in place.

You can now fit in any 5.25" devices you have. Twist off the masking metal and pop out the plastic masks in the front of the tower. I put in my two CD drives and used a leftover bracket from the old casing to secure my last 3.5" (now unused) Barracuda drive. I also connected up one of the CD drives to the cable from the audio connector.

Slide your Zorro cards into the bus board (a PicassoIV and an Oktagon SCSI card) and screw them down. Included with the kit is the lead from the power brick and a power extension cable which needs to clip into the motherboard. Another cable runs from this to plug into a cable and socket for the 'Reset' switch.

The small fan at the top of the casing needs to be plugged in to the extension cable via a two-pin plug. Finally, cable up all the drives, paying particular attention to the orientation of the floppy and hard disk connectors.



The CPU card and the new Zorro bus board housed in the tower.

FINAL TOUCHES

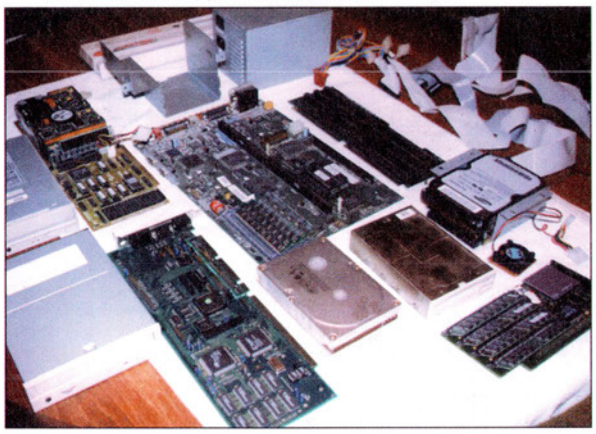
Plug in your monitor, mouse and keyboard. Use the keys provided to 'unlock' the Amiga, allowing the keyboard and mouse to work. Check everything, then check it all again to make sure before turning the Amiga on. It should boot up as normal.

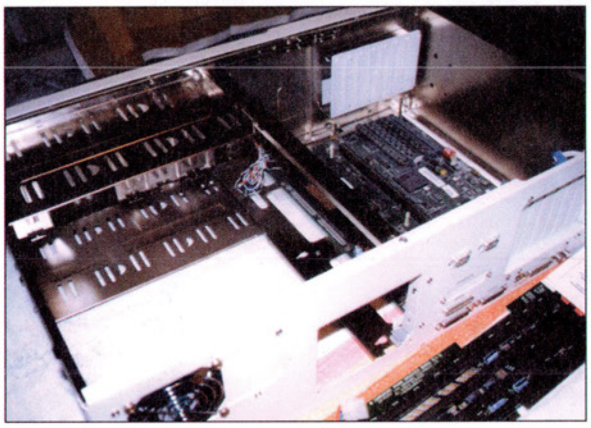
If you can hear the drives whirring but nothing else happens, check that the CPU board is really secure.

Once the Amiga is working, power it down and put the outer casing back on. Then turn the tower on its side and screw in the 'feet'.

Finally, stick on an Amiga sticker and a Boing ball to show the world that the towering hulk dwarfing your monitor is an Amiga – back for the future.

The dismantled A4000's innards laid bare (below left).





The A4000 motherboard installed in the tower system.

Reader Reviews A600 HDT

After reading the Workbench section of *AF106*, where Mr. Nicholas Sherman was asking about A600 HD installation, Vasilios Karageorgis couldn't help but reveal the A600's expandability.

After five years of usage with all sorts of peripherals and components hanging and spreading all around my desk, a particularly ugly sight, the tower box was a big relief.

Nothing would be accomplished if I hadn't discovered that Dart manufacture PC keyboard interfaces for every Amiga model. Installing such a device isn't recommended for the faint-hearted because it requires soldering cables in five spots of the A600 motherboard. The tower case's power supply was a piece of cake to adapt to Amiga use thanks to the instructions in *AF99* (Tower of Power).

A600 SET UP

- **A6000 (NTSC) with 2Mb chip RAM**
- **Full size PC tower case with 230W power supply**
- **Viper A630 68030 40MHz, MMU and 4Mb fast RAM**
- **Squirrel SCSI interface**
- **Mediavision Reno 2x portable CD-ROM drive**
- **Blittersoft's external (converted to internal) 176Mb HD 3.5" floppy drive**
- **Seagate Medalist IDE 630Mb HD**
- **Western Digital Caviar WD 210HD**
- **PC keyboard interface by Dart Computer Services**

HARDWARE

The box features six 5.25" bays and two 3.5" bays. The motherboard had to be placed horizontally across the box with the connectors facing towards the top. The original keyboard was thrown out of the window as almost half of the keys weren't operational any more. The hard disks were connected in chain to the IDE connector (without a buffer) giving me no serious problems. My only real problem lies in the fact that the Caviar drive seems to be incompatible with some software, such as *Amiga Vision*, and some programs (mostly utilities) don't run. However, that was also a problem with the Caviar, even when I used the drive by itself.

> "One thing to note is that you can't use a hard disk unless you have at least version 2.05 of Workbench..."

I've also noticed that my Quadra 950's ROM image wasn't saved to the Caviar in the proper size and was therefore unusable, but it was perfect on the Seagate.



Have you ever seen so much computer gear on one desk at once? The boxouts on this page contain a complete list of what all this hardware actually is.

The Viper is a big upgrade, giving me a speed that I wouldn't expect. I have the old 4Mb version because I didn't want to risk incompatibility with the PCMCIA port.

However, if I had the ability to purchase another board now, I'd go for the 32Mb new Viper. Although clocked at 33MHz, it has an FPU and memory also means a lot. The MMU was tested and it operates well and sometimes I pass the OS to fast RAM for quick startup and fast operation.

A600 PROS AND CONS

The main object of this review is the A600 itself. If AGA is not of concern to you and you can find an A600 in good condition then grab it. In the five years that I have had mine, the only problem was the keyboard. Commodore wouldn't have built this machine with SMT (Surface Mount Technology) if it didn't mean quality and durability.

One thing to note is that you can't use a hard disk unless you have at least version 2.05 of Workbench as the IDE port won't work. If anyone has used a software Kickstart emulator and 2.04 downwards then please let the rest of us know if the port works.

PCMCIA is another door to expansion as hooking up the Squirrel brings you into the world of SCSI. Just make sure that you've got plenty of power or you'll be heading for crashes.

I've also just got a 16x Atapi CD-ROM by Hitachi for the tower and it passed the test drive so I'll hook it up shortly. If you take a good look at the inside view of the tower, you'll notice the extension cables from all of the ports leading to the rear of the tower.

You never know what can be done on the A600 HDT. I've even managed to run *Fusion* with 4Mb fast and 2Mb chip RAM. If only I could totally understand the usage of virtual memory on this one. The A600 is a great computer that's let down by the lack of AGA.

OTHER PERIPHERALS INCLUDE

- **Amigen (an NTSC genlock from Mimetics)**
- **Digiview from NewTek**
- **Optivision RGB splitter**
- **Phoenix Midi interface**
- **DeskJet 540C HP printer**
- **CZ 230S Casio keyboard**
- **RCA 6-head stereo VCR (NTSC)**
- **Panasonic NV 210 Camcorder (NTSC)**
- **A1000 purchased in 1986 with 2Mb RAM expansion, Pro MIDI sampler by Mimetics, ECE MIDI interface, all hooked up to the A600 via PARnet.**



DataTypes

John Kennedy explains how DataTypes make your life easier and take the worry out of programming..



WHAT ARE THEY?

DataTypes are a relatively new feature of the Amiga's operating system, introduced with Workbench release 3.0 and onwards. You can find the DataTypes currently installed on your system lurking in the Devs/DataTypes drawers on your boot disk.

By default, the operating system includes DataTypes for sound files (8SVX), AmigaGuide interactive help files, graphics (ILBM) and text (FTXT), but the beauty of the system is that you can add many more yourself.

The *MultiView* utility included with Workbench is the perfect example of DataTypes at work. Although it's only a tiny program, *MultiView* can load and display almost any standard Amiga file, including text, graphics and help files.

It can do all this not because it's a smart program in itself, but because it makes use of DataTypes.

WHAT DO THEY DO?

The idea behind DataTypes is to separate an application program from its data, or at least to free the program from worrying about the exact manner in which data is stored in files. Writing a computer program is difficult enough, but imagine trying to add support for all the different file formats that exist. A graphics program alone would have to support IFF, GIF, JPEG, TIFF, BMP, PNG… the list goes on and on.

These are all legitimate file formats and it's likely that someone, somewhere would need the program to read or write these files. The programmer could spend most of their time simply re-inventing the wheel by writing code to deal with all these file formats.

> "Once the programmer has included DataType support in his or her application, they get some abilities for free."

DataTypes allow the programmer to completely forget about supporting all these different file types. Instead, the application is programmed with information on how to communicate via DataTypes. Once this is working, the programmer can leave all the worrying about supporting file formats to the DataType system. The program can assume that all the data arriving and leaving is in a single, common, Amiga-friendly format. When it is loaded or saved, the DataTypes perform the conversion duties.

There are therefore several features which DataTypes make possible.

1 DataTypes allow a program to interrogate a file to determine what kind of data it contains. This is actually a rather tricky process to attempt without DataTypes. Other computer systems tend to force files to have a particular filename extension, but this doesn't really apply on the Amiga.

2 The programmer can concentrate on developing the application, not on processing the many different types of data formats which exist. The DataType code can be built-into the program relatively easily, taking the burden away from the programmer.

3 A program can transparently deal with lots of different file formats, even mixing them on the fly. This is

because all the data is converted into the Amiga's own internal format before it is used, effectively hiding the conversion process from both the programmer and the user.

4 Once the programmer has included DataType support in his or her application, they get some extra abilities for free. For example, you get the option to easily make use of the Amiga's temporary storage area called the Clipboard.

5 Future proofing. If a brand new file format appears, all of the existing application programs don't need to be re-written – if they use DataTypes, only a new DataType needs to be created and the programs will continue to work as before.

For the user (that is, you and me) DataTypes are an extremely useful tool. We can choose the best DataType for a particular task. For example, there are a great number of JPG DataTypes available. Some might be optimised to work with standard Amiga graphics modes, others might be better suited for use with systems that have graphics cards. Some might be coded to make use of 68030 or better processors and perhaps in the future there will be PPC versions too.

As we have to install the Datatype ourselves, we therefore have the freedom to select the one that is most suited to our needs and our hardware.

Graphics formats often change and evolve, and again, being able to update our Datatype means the application can be upgraded to support the new features, without a major re-write.

In fact, the original application won't actually change at all – only the DataTypes we install are changed.

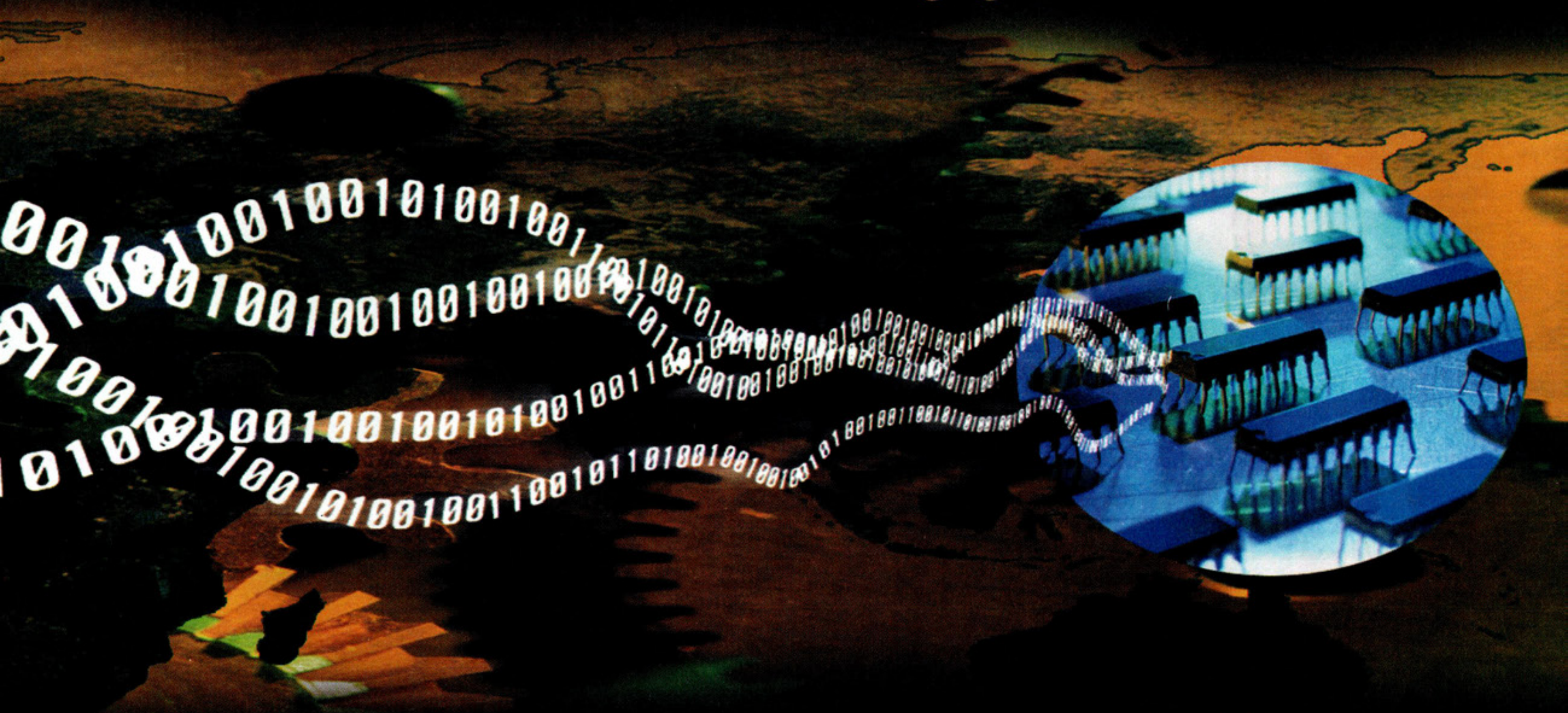
HOW DO I INSTALL A DATATYPE?

When you download or copy a file and un-archive it, you'll usually find it contains several files. Some authors may even include their source code. Although this source code will be of no use to non-programmers, it can encourage further development.

> **"DataTypes allow the programmer to completely forget about supporting all these different file types."**

Let's assume that the Datatype we are using is designed to let your Amiga deal with sausages, and is called "sausage". When you sift through all the files, you should find three with names like this: sausage.datatype, sausage and sausage.info.

It's very important that you copy the files into the correct locations. Place sausage.datatype in the `Workbench:classes/datatypes/` directory. The sausage and sausage.info file should be copied to `devs:datatypes/`. If you're lucky, there will be an installation routine that will do this for you automatically.



Remember to check in case there are multiple versions of sausage.datatype, perhaps for 68000 and 68020, or FPU and non-FPU versions. You must copy the correct one and ignore the others. If you aren't sure, stick to the 68000 version, although bear in mind that you might not be using your system to its full advantage.

Using a DataType is easy. In fact, you might not even know you are doing it. Some programs will use the support for new file formats completely transparently. For example, *MultiView* should be able to deal with sausages without you doing anything special.

Other programs may require you to select a special Datatype requestor and then select the file type you want to deal with. Consult the documentation that came with the program to find out exactly how DataTypes are supported.

DataTypes used to be unique to the Amiga, but other operating systems have started to see the benefits they provide. It's obviously too late to give Windows this kind of intelligence, but BeOS includes support. There might be a little hint of what is to come in that.

WHERE DO I GET THEM?

The best source for DataTypes is Aminet. Aminet is the repository of Amiga files on the Internet. It's free for anyone to access and is a vast store of software and information. Authors looking to get their work seen by as many people as possible upload their files to Aminet.

Amongst all its other treasures, Aminet contains a huge number of DataTypes. These DataTypes can be downloaded and installed only by an Amiga with Workbench 3.0 or later, instantly providing support for a new range of files.

Last time we looked, there were over 120 different DataTypes in the archive. These included support for graphics files (such as GIF and JPG), animations, sound files (including WAV) and even one for ZX Spectrum screen dumps.

When you install a particular application, the programmers might recommend a certain Datatype to install and use. For example, if you are interested in surfing the Internet using a world wide web browser, you might find you need to install a set of GIF and JPEG DataTypes. This is because the Web is dominated by the PC and Mac, where the IFF graphics format is largely unknown.

DataTypes may also be distributed on magazine coverdisks, or on CD-ROMs or floppies from PD libraries. You will probably find that they have been archived using *LhA* or *LZH* compression, so you will need suitable un-archiving tools in order to make use of them.

SCREENPLAY

The latest games, hints and some clever programming from you!



We're all slaves to the clock. After playing the games that came in this month, a new, big-name release arrives just before we go to press.

Now this poses a problem for us. Do we rush the review in or do we hold it back so we can play it some more, and therefore get a better and more accurate view of the game? Regular *AF* readers will know there's only one answer. Though we want every issue of this mighty organ to be informative and entertaining and full of up to the minute news and reviews, we also want to make sure we get it right. Check out this month's selection of finished and soon to be finished games – I've got some more 'research' to do. Enjoy...

Andy Smith

AMIGA FORMAT'S REVIEW POLICY

WHAT OUR REVIEW SCORES MEAN

Every month we scour the world's software houses for the latest and greatest Amiga games. We try to ensure we keep you as up to date as possible and we'll stop at nothing to bring you the best, definitive, no-nonsense reviews of the games that matter.

90+%	The crème de la crème. Only the very best, most playable and original games are awarded an AF Gold – the most highly prized rating there is.
80-89%	These games are very good, but due to minor flaws are not the finest examples of their genre.
70-79%	Good games which are worth buying, especially if you have a special interest in a game type.
60-69%	Average releases with somewhat limited gameplay and appeal. Games in this category tend to be flawed.
50-59%	Below average games which are unlikely to impress your mates or your wallet..
40-49%	Overwhelmingly poor quality games with major flaws and appalling gameplay.
Under 40%	The absolute pits.

Previews





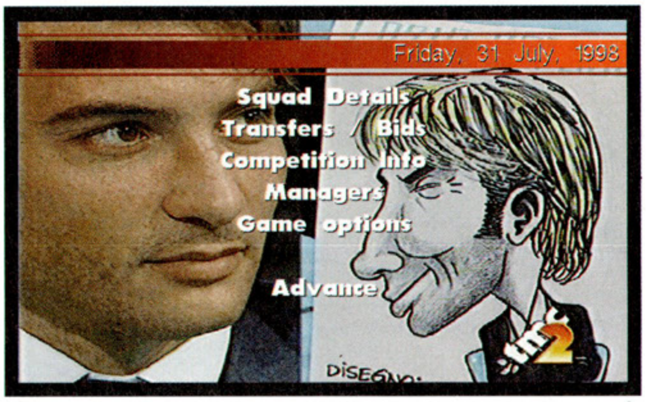

Football and fighting, space and super heroes. Andy Smith takes a peek at what you'll be playing soon...

The Boot Room

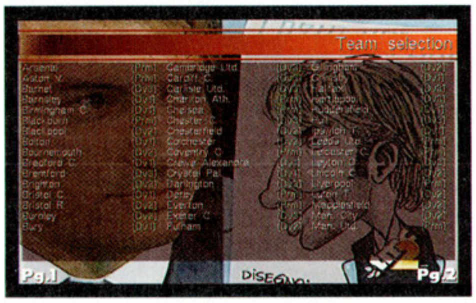
The Boot Room	£25
Release Date	Christmas '98
Publisher	TBC
Requires	AGA machine

Of course, not every footballer in the league is going to be a David Ginola. As long as they can play, eh?

At the start of a new football season there's a lot resting on your shoulders. The players and the fans are full of optimism, hope and belief. Whether any of that optimism is misplaced, hope forlorn and belief misguided is down to your skills as team manager.



The Boot Room is a new football management game from brothers and coders Peter and Michael Price. The game uses all the real names of your favourite players (FA clearance anyone?) from your favourite teams, whether they're currently in the Premiership, the First Division or whatever.



There is, of course, only one team in the world worth picking...

Whether your fave players do any good on the pitch is going to be out of your hands though. There's no arcade section to *TBR* as this is pure management at its nitty-grittiest.

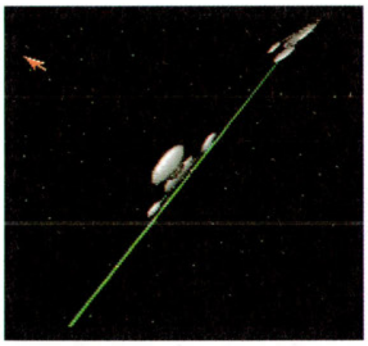
The game's probably going to feature foreign leagues, although that's more likely to come from end users first who can then pass on the updated information (a la *Foundation*) to other *Boot Room* players. The boys Price are hoping to have a lot of user interaction in this way by using *The Boot Room* as an engine for a kind of real-time play by email football league, played between people from all over the world and run on a central server.

The exact details of this haven't actually been finalised yet but as soon as we get more info we'll pass it on.

Space Station 3000

Space Station 3000	£TBC
Release Date	Autumn '98
Publisher	TBC
Requires	AGA machine

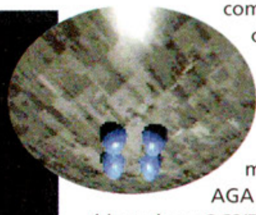
For those of you who like to combine their resource management games with a bit of space combat comes *Space Station 3000*. The general idea here is to build and develop a space station (spooky, eh?) and get it working for you. That means making it attractive to all those space traders out there who are going to flock to your station to make their transactions.



If you don't like the look of someone's space ship, destroy it and collect up the debris. Smart!

Though I haven't had the chance to play a demo of the game, the author, Stuart Walker, seems to have taken a lot of ideas from the MicroProse game *UFO* in that there's research to be done (including researching those oh so advanced alien ships that are going to be straying within your cross-hairs), hospitals to build, engineers to employ and wads of cash to be made.

Stuart also seems to have nicked a couple of *Elite*'s ideas too, as you can opt for a relatively peaceful life as a rich mogul if you opt to orbit your space station around safe planets, or you can make your life a little more interesting and head off into more treacherous parts of space.

As soon as things start to go your way you can invest your credits in new space on your station for other traders to move in – you're making an out of town shopping complex that really is out of town!

The game is due to be released on CD to start with and you'll need a machine with an AGA chipset to run it (though an OCS/ECS version is in the pipeline) and we're expecting a review copy in the next couple of months, so we'll keep you posted. The price is yet to be decided.

Stretch your intergalactic entrepreneurial skills in Space Station 3000. We can hardly wait.

X-Men



The *Quake* twists just keep coming and the latest bunch fighting to empty your coffers are those uncanny X-Men (or are the Uncanny X-Men another bunch altogether? Comic anoraks send a postcard to the usual address...).

Here's the chance to breathe new life into your registered and installed version of *Quake* (assuming you've finished it, along with the rather excellent add-ons we've been recommending over the last couple of months, such as *Malice*) as you enter the *Ravages of Apocalypse*.

Now, as you'd no doubt expect, this Apocalypse chappie's a bit of a rough sort and not one to mess with on the best of days, but now is definitely not the time to be messing with him. After most of the world has been devastated during the Onslaught (I'm sure X-Men fans will know what that's all about, but it sounds unpleasant) he's gone and cloned a whole bunch of the only surviving super heroes, the X-Men.

Apparently the Fantastic Four proved themselves to be the Floundering Four and all perished, and the Avengers turned out to be the Vanquished, so he's using the X-Men as his secret weapon in his plans to take over the world.

And that's where you come in. Armed with some eight new weapons, including the pain-inducing Nuclear Energy Radiation Dispatcher and the aesthetically-pleasing Orb Launcher, you've got two new chapters to work your way through as you attempt to thwart Apocalypse's plans (and as you're doing that there's more than just a hint that ol' Apo's not working entirely alone here).



As well as the characters, the game's scenery is all drawn in the same style as the Marvel comics.

As is invariably the case with these *Quake* add-ons, as well as new weapons and new ammo to use in them, these super hero clones also have a range of super powers at their disposal. These powers might be nasty enough when you encounter them in the normal single player game, but if you're one of the lucky few able to play this networked or online then you can even elect to play Deathmatches where it's X-Man vs X-Man, using nothing but super powers. Ouch!

As with *Malice*, these *Quake* add-ons often benefit the most when they're taken out of the whole *Quake* world and given a new twist.

> "... subtle gameplay changes with good atmosphere can really make the game into **something special**."



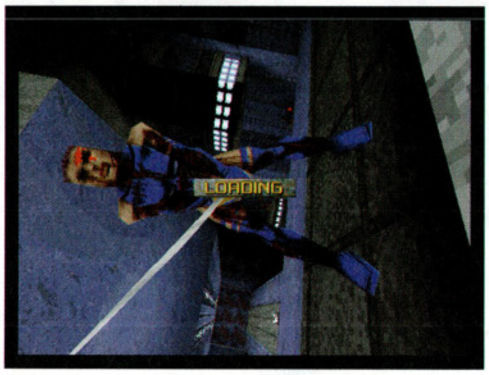
They may be X-Men but they don't like being hit with multiple rounds of high explosive shells.

Instead of simply 'more of the same', subtle gameplay changes with good atmosphere can really make the game into something special.

We're certainly looking forward to getting our claws into this one in next month's ScreenPlay. AF

X-Men	£18.99
Release Date	Out now
Publisher	Alive MediaSoft
Requires	Quake



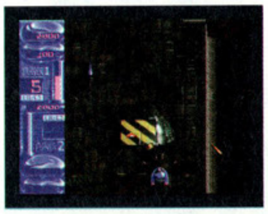






Birds with big swords always equal trouble. Stay clear of 'em and shoot 'em from a distance.

Ultra violent Worlds





Those spinning hazard warning slabs (top) can't be destroyed and must therefore be avoided. Enemy ships are fair game though (above).

Shoot-em-ups come and shoot-em-ups go. Unfortunately, Andy Smith's always around...

And the last thing we had that resembled a new shoot-em-up was the rather awful *Powder* a couple of months back. However, here's new German outfit Vorlon's *Ultra Violent Worlds* to restore our faith in the genre.

> **"Don't worry about the aliens shooting at you as most just fire straight ahead in the hope that you'll be in the way..."**



Stage two and life gets noticeably harder – you'll wish the aliens on the first level dropped more cash for you to spend in the shop at the end.

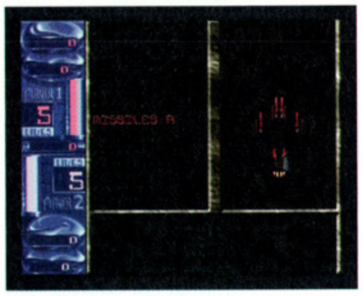
New boys Vorlon have opted for a vertically scrolling blaster for their Amiga debut, allowing one or two players to take on the might of the alien invaders, the Zarnaxians. All well and good so far, if a little predictable.

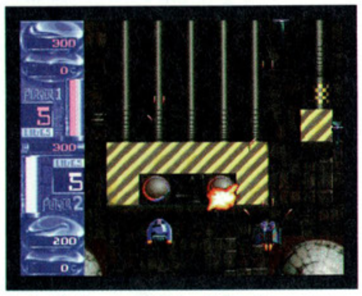
Starting out with a basic ship with basic weapons, the player survives the oncoming waves of Zarnaxians for as long as possible, or until the shop appears at least.

At what seem like random intervals, Zarnaxian ships are in the habit of dropping blue credit discs. Collect one and you've earned yourself 100 credits to spend in the shop at the end of the stage.

Sadly, there seems to be little rhyme or reason as to which ships are carrying the credits. Despite the fact that there are very definite waves of enemy craft, you don't get rewarded for taking out, say, one wave of a particular kind of craft, or for destroying a certain number of different craft. The credits just seem to appear when they feel like it and this makes forward financial planning difficult.

The playing area's wider than one screen so you can wander to each side of the screen and have the playing area scroll for you. This adds a little something, although it's not quite as effective in two player mode because if your mate decides to stick in the right hand corner of the playing area then there's no way to shift him and get the get the screen to scroll unless you're really quick when he dies.

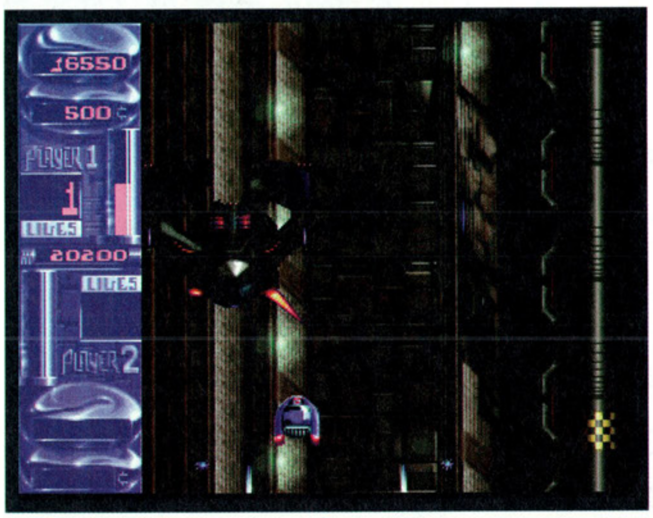


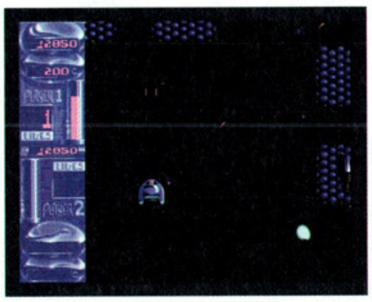


Curiously, the second player in two player mode has a ship with much better armour than you.

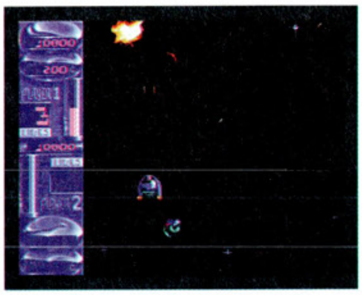
Even then he can simply scroll it back to the right unless you've had the foresight to go and hide yourself in the far left corner.

Survive the onslaught of the first stage, have a pop at the end of level boss (who appears, hangs round for a bit and then disappears, before popping up a few minutes later at the proper end of the level) and the chances are you'll have picked up a few credit discs and can't wait to spend 'em in the shop.

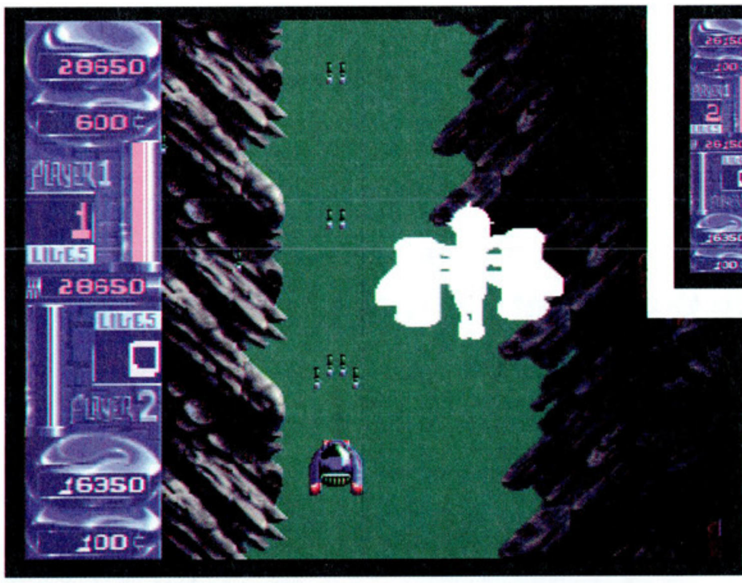


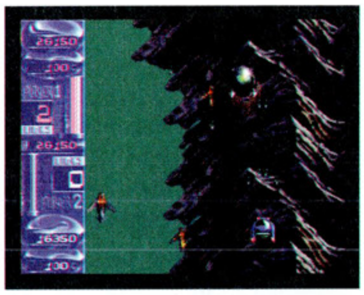


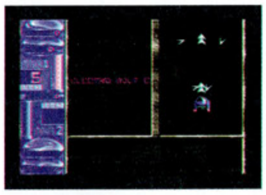




That bubble you've just passed recharges your energy back to full so it's worth trying to grab.







This is the weapon you'll want to buy, but you won't be able to afford it until much later in the game.

Here you'll have the chance to either buy yourself a new, harder wearing ship or a better weapon. Curiously, the second player in a two player game always starts with a better ship than you, but we'll not concern ourselves with that at the moment. All right, so you're perusing the long list of extra weapons available and want to buy something that's going to be a lot more effective than the weedy weapon you're given at the start. Prepare for some disappointment.

Money problems

Most of the good things cost thousands of credits and the chances of you getting to your first thousand on the first level are slim. The credits don't come nearly as often as you'd like and it's doubly frustrating when you destroy a craft near the edge of the screen (assuming you've scrolled as far left or right as the game will allow because there seems little point in hanging around in the middle of the playing area where the action's more intense but the rewards are just as sparse).

At this point, you get to watch that gold-dust blue disc skip off the side of the screen and into oblivion. On later levels the credits come a little easier because you get more per disc, but then it's usually too late because your chances of reaching the second shop and indulging in some retail therapy are slim indeed.

Assume you have gained thousands of credits by saving them up over the first few levels. There's a large array of weaponry to choose from, which should make getting through the subsequent levels somewhat easier because the difficulty gets ramped right up from level two onwards. Ground-based installations make an appearance, the alien ships get tougher and the sneaky tricks become more frequent. Ships come at you from the sides, from behind and from below. Those Zarnaxians just don't play fair.

To be honest, neither do the programmers. Though everything looks nice and moves well, *UVW* fails to get the blood pumping. The alien waves follow the old 'weaver birds' pattern, whereby they lazily swing from side to side down the screen. And these are the interesting ones.

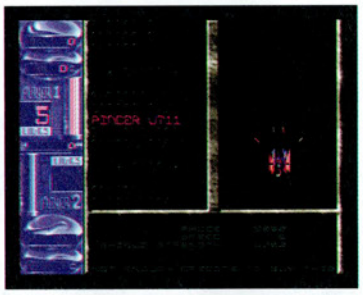
Most of 'em just come straight down the screen, firing away. Don't worry about the aliens shooting at you as most just fire straight ahead in the hope that you'll be in the way, which you inevitably are because there are so many of them.

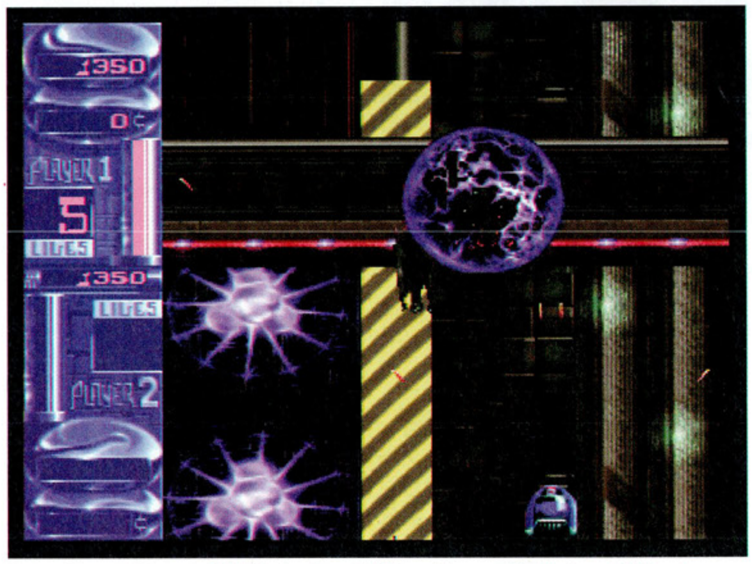
I've been accused recently of single-handedly attempting to destroy the Amiga games market by not giving games super-high scores, whether they deserve them or not. I can see the argument – people want to feel that the Amiga games scene is still buzzing with great new games coming out all the time. The sad thing is that it's games like *UVW* that are killing the Amiga games market.

It's not a complete dog, it's just so lacklustre. Everything in *UVW* has been seen and done before and there are no new tricks or twists to keep you on the edge of your seat.

The gameplay is hardly inspirational and all in all you're left with a very average, very mundane shoot-em-up. There are more enjoyable PD shoot-em-ups and just because this is new doesn't mean it's worth spending your money on. Sorry Vorlon, there's a lot more work needed here.







These spiky meteorites are shielded but well worth killing as they occasionally drop valuable coins.



After each stage you're treated to a lovely rendered picture. We just wish the things were animated...

PUBLISHER: Vorlon Software (www.vorlonsoftware.com)
PRICE: £TBA
VERSIONS: A1200
REQUIREMENTS: AGA, 4Mb CD
RELEASE DATE: Out now

GRAPHICS: ●●●○○
Smooth scrolling, nice backgrounds but the enemy shots can be difficult to see at times.

SOUND: ●●○○○
Nothing special here. Even the 11 music tracks are less than inspirational.

ADDICTION: ●●○○○
Play it a bit and then consign it to the bottom of the wardrobe. Not enough umph.

PLAYABILITY: ●●●○○
It's easy enough to get to grips with, it's just not much fun doing it.

OVERALL VERDICT:
UVW will be lost amongst the thousands of other mediocre shoot-em-ups.

60%

Reader Reviews

F1GP-Ed

Your Reviews

This is your chance to give us your opinion on any Amiga games. Write a fair and accurate review of about 750 words on the best or worst software you've played and you could see your work appear in AF!

We will also need a good-quality passport photograph of you. Send your reviews to: Reader Game Reviews • Amiga Format • 30 Monmouth Street • Bath • Somerset • BA1 2BW

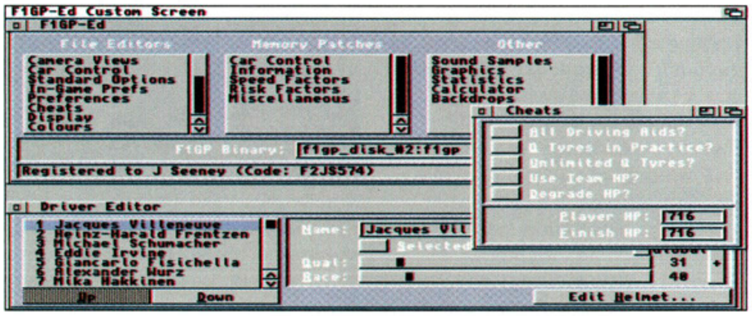
In the first of our reader game reviews, Jamie Seeney gets behind the wheel of the Formula One Grand Prix Editor.

Ever since I was two feet high I've been a fan of Formula One racing. I would watch the qualifiers to see who got pole position and get the crisps out for when the race started.

When I wasn't watching F1, I would play *Grand Prix 2* on my old Spectrum 48K, but since I bought an Amiga there was only one F1 simulator that stood out from the rest – *Microprose Formula One Grand Prix*. Thanks to *F1GP-Ed*, it still shines as much as it used to.

F1GP-Ed is up to version three now. It has been developed over four years and has improved by leaps and bounds. In that time, it has grown into a huge program with over 22 options and loads of sub options.

> Over 1,500 people have registered and considering all the functions it performs, I'm surprised that more haven't.



Almost every single option in Formula One Grand Prix can be edited to suit your own needs and preferences, from the colour of your driver's helmet to the frame rate at which the game runs.

Over 1,500 people have registered and considering all the functions it performs, I'm surprised that more haven't. There are so many options it would take quite a long time to tell you about them all, so I'm just going to tell you about the most useful and helpful of them.

One of the most important features is the ability to increase the frame rate at which the game runs. With my Apollo '040 25MHz, I got about 24 frames per second with detail set on low, which is a massive improvement over the standard eight frames per second.

One other important change is the computer competition levels. The 1998 datafile (which is included) brings the computer's driving standards up to date. This makes the game a lot harder because the computer controlled cars will give you a real run for your money.

F1GP-Ed will enhance almost every aspect of *F1GP*. You can change the colours of the cars, helmets and pit crews. If you're fed up with the old cockpit then you can replace it with one of your own or one of the cockpits supplied with *F1GP-Ed*. If you want new menu backdrops then you can replace them too.

There were some very nice pictures on *AFCD27*, as well as the full version of *F1GP*. Installation is easy: you're asked where you want *F1GP-Ed* installed and the files are then unpacked and copied to where you wanted them. Simple.

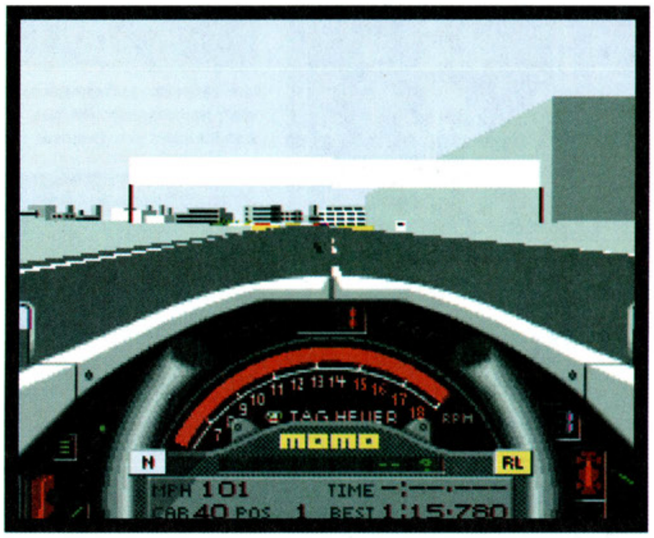
The manual is supplied in AmigaGuide format and it tells you everything you need to know about the options available. The Help key can also be used to bring up the online help.

One other useful option is the Standard Options. This lets you preset all the options in the game, such as qualifying time, oppositions spread, race distance, etc. Once everything is set how you want it, select 'Save to F1GP binary' and you'll never have to set the options again.

Are there any reasons not to buy *F1GP-Ed*, I hear you say? Well, it doesn't use MUI, it's very system friendly, it's easy to use, it makes *F1GP* even more fun and it makes a great cup of tea as well. Actually, it doesn't do the last one, but the only reason I can think of for you not to buy this is if you don't like Formula One racing in the first place.

Oliver Roberts has done a fantastic job of bringing *F1GP* back to life, so pay your six pounds and make *F1GP* more realistic than ever.

Why chug along at eight fps when the editor lets you soup things up to a sumptuous 24 fps (accelerator board permitting)? Editors are normally a pain but this one isn't.



Andy's Verdict

How can you fail to be impressed with this piece of software? It's as close as you'll ever get to coding the thing yourself, just the way you like it. The speed improvements, the ability to shift the goalposts as near or as far away as you like (I'm talking about the standard of the other drivers here) and the chance to get everything looking as you want is not only good fun but it breathes new life into a game that's going to entertain you for months anyway. Though unintentional perhaps, playing around with editors like this also gives you a great insight into how a game hangs together. If you've ever tried to write a game, you'll know it can take a lot of trial and error to get things right. Here you can alter a couple of things and see the differences almost immediately. Cracking.

DISTRIBUTOR: Oliver Roberts, 30 Tillett Rd, Norwich, NR3 4BJ. Email oliver@poboxes.com

Also on our CD every month in the -Screenplay-/OtherStuff directory

PRICE: £6

REQUIREMENTS: F1GP

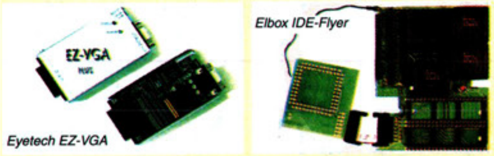
OVERALL VERDICT: Super, smashing, great!

97%

Eyetech Amiga Parts & Price Index October 1998 - 44 (0)1642-713-185 - 07000 4 AMIGA

Interfaces and Adapters: EZ-Key & DIY Tower Components

ADPT-EZKY	Amiga/PC k/b -> A1200 kbd ribbon cable	36.95
ADPT-EZKY-A4K	A1200 EZKey/6p->5p adptr/A4000 kbd bundle	69.95
ADPT-EZKY-W95	Amiga/PC k/b->A1200 rib cab+Win95 kbd	49.95
ADPT-EZK2	Mk 2 Amiga/PC k/b -> A1200 kbd direct connect	28.95
ADPT-EZK2-A4K	A1200 EZKey MK2/6p -> 5p adptr/A4000 kbd bdle	58.95
ADPT-EZK2-W95	Mk2 Amiga/PC k/b->A1200 rib cab+Win95 kbd	38.95
ADPT-HD-2/3	2.5"/44way -> 3.5"/40w+4w & mtg bracket	11.95
ADPT-HD-3/5	3.5" Zip/SyQuest/FDD/HD brkt/pl ->5" bay	5.95
ADPT-KBD-5P6P	Amiga/PC k/b adapter 5p din-F ->6p m/d-M	5.95
ADPT-KBD-6P5P	Amiga/PC kbd adapter 6p mindin-F ->5pd-M	5.95
CAB-KBD-MF	5p DIN M - 5p DIN F k/b ex cable 1.2m	7.95
ADPT-DF0-FP	Tower faceplate adapter for A1200 int FD	6.95



ADPT-DF0-TWR	34-34 way cable and faceplate for DF0	12.95

Interfaces and Adapters: A1200 Ethernet, SCSI

ADPT-ETH-BNCT	BNC T-piece 2xM + 1xF	4.95
ADPT-ETH-TERM	Ethernet BNC coax terminator 50R	4.95
ADPT-PCM-ETH-C	PCMCIA ethernet card with Amiga/PC drivers	89.95
ADPT-PCM-ETH-H	Hydra PCMCIA ethernet card with Amiga drvrs	129.95
CAB-ETH-60C	Ethernet coax/BNC-F 60cm for Siamese	9.95
CAB-UPT-X60C	Crossed twisted pair/RJ45 for Sisys 60cm	6.95
ADPT-SCS-CSQR	Classic Squirrel PCMCIA SCSI i/f 50pCM	59.95

I/F & Adapters: Flickerfixers, VGA Adapters, Monitor Leads

ADPT-VGA-BV4M	BVision 4MB gfx card for A1200 (needs PPC)	169.95
ADPT-VGA-M2SD	EZ-VGA-Mk2 external s/doubler PLL u/gradable	69.95
ADPT-VGA-PLFF	EZ-VGA-Plus external flickerfixer 23F-15F PLL	99.95
ADPT-VGA-SDUG	SDBL2 to SD-flickerfixer u/g	50.00
ADPT-VGA-INSD	EZ-VGA internal A1200 s/doubler non-upgrad'le	54.95
ADPT-VGA-INFF	EZ-VGA- internal A1200 flickerfixer	89.95
ADPT-VGA-SESD	EZ-VGA-SE s/doubler 23F-15M Xtal not u/g	54.95
ADPT-VGA-SEFF	EZ-VGA-SE flickerfixer 23F-15M Xtal	89.95
ADPT-VGA-15M23M	VGA 15pHD-M -> 23pD-M Amiga RGB adapter	14.95
ADPT-VGA-15M9F	Adapter from 15p HD-M VGA to 9pD-F	9.95
ADPT-VGA-9M15F	Monitor adapter 9p D-F to 15p HD-M	9.95
ADPT-VGA-AMON	Auto Amiga/CV643D m/sync monitor switch	39.95
ADPT-VGA-UNBF	Amiga 23 pin(f)-15 pin HD(f) VGA adapter	12.95
ADPT-VGA-BUF	Amiga 23pin-F to 15pinHD-F buffered adapter	16.95

I/F & Adapters - IDE/ATAPI, Serial, Parallel & Floppy Drive

INT-IDE-FLYR	Elbox 4-dev high performance buf'd A1200 IDE i/f	59.95
INT-12I-EZCD4	Mk4 4-dev buf IDE i/f w/AIPU w/A1200 CD s/w	38.95
INT-12I-EZCD4/C	Mk4 4-dev buf IDE i/f w/3x40,2x44 13cm cabs	48.95
INT-12I-EZCD4/CE	Mk4 4-dev buf IDE i/f w/3x40, 2x44cabs, EZIDE	58.95
INT-12I-EZCDSE	Economy 4-dev buf IDE i/f w/A1200 CD s/w	24.95
INT-12I-EZCDSE/C	Econ 4-dev buf IDE i/f w/3x40, 2x44 13cm cabs	34.95
INT-12I-EZCDSE/CE	Econ 4-dev buf IDE i/f w/3x40, 2x44cabs, EZIDE	44.95
INT-4KI-CD4	4-device EIDE i/f for A4000 w/CDROM s/w	19.95
INT-FDD-DF0	Interface for std Sony FDD for DF0 880KB	14.95
INT-SER-PTJR	PortJunior - 460KB serial i/f for A1200	39.95

Zorro 2/3 Boards and Adapters

GFX-Z2-CV643D	C64/3D graphics card w/out f/fixer (limited stock)	149.95
ADPT-VGA-AMON	Auto Amiga/CV643D m/sync monitor switch	39.95

Cables & Cable Adapters: Audio & Mains

CAB-AUD-CD	CDROM invtÖd T audio cab .6m + 2xRCA plg	9.95
CAB-AUD-MIX	RCA(phono)-M -> RCA-M+RCA-F mix lead 1.8m	6.95
CAB-AUD-2M2M	RCA(phono)-2xM -> RCA2xM stereo lead 1.8m	4.95
CAB-AUD-MJ/PH	3.5mm st minijack->2xphono-M plugs 1.2m	5.95
ADPT-AUD-RCA	RCA(phono)-M ->2xRCA-F	2.50
ADPT-AUD-RCA-G	RCA(phono)-M ->2xRCA-F gold plated adapt	3.50
CAB-IEC-1.5M	AC power cable 13A plug -> IEC skt 1.5m	2.95
CAB-IEC-4X13	AC powerstrip 1xIEC-M -> 4x13A-F mains skt	19.95
PLUG-IEC	Rewirable IEC monitor plg for PSUs/MT/DT	4.95

Cables & Cable Adapters: Serial, Modem, SCSI, Printer

CAB-SER-EX2M	DB25-M -> DB25-F RS232 extn cab 2m	7.95
CAB-SER-EX50C	DB25-M -> DB25-F RS232 extn cab 0.5m	6.95
CAB-SER-NUL2M	Null modem cable w/ D9F & D25F at each end	9.95
ADPT-SER-25F9M	25p-F to 9pM serial RS232 adapter	4.95
ADPT-SER-25M9F	25p-M to 9pF serial RS232 adapter	4.95
ADPT-SCS-50C2F1M	50pin Centronics 'T' 2x F to 1 x M SCSI adapter	14.95
CAB-BT-EX10	10m BT extn cable + 2 way phone adapter	9.95
CAB-BT-MOD	FCC684/6 to BT4 modem phone lead 1m	5.95
CAB-SCS-25/50	SCSI cable DB25-M -> Cent50-M 1m	9.95
CAB-SCS-25M/25M	SCSI cable DB25M-DB25M mac type	9.95
CAB-SCS-50M/50M	SCSI cable Centr50M->Centr50M 1m	9.95
CAB-SCS-50H/50M	SCSI-2 cable 50h/pDM->Centr50M 1m for PPC	19.95
CAB-SCS-50H/50M	SCSI-2 cable 50h/pDM->25D-M 1m for PPC	19.95
CAB-PAR-FULL	Bidirectional printer cable all pins connected	9.95

Cables & Cable Adapters: VGA, Keyboard, Switchboxes & Cables, Scart Cables

ADPT-SW-S/K	Dual monitor & k/b switchbox	19.95
ADPT-SW-S/K/M	Dual monitor, k/b & mouse switchbox	24.95
CAB-KBD-MM	5p DIN M - 5p DIN M k/b cable 1.2m	7.95
CAB-VGA-MF	15p DM-HD - 15p DF-HD VGA ext cable 2m	9.95
CAB-VGA-MM	15p DM-HD - 15p DM-HD VGA cable 2m	9.95
ADPT-SCAR-CMP	Amiga comp video (RCA)+2xAudio to SCART	12.95
ADPT-SCAR-RGB	Amiga 23p+2xRCA to RGB TV SCART + audio	12.95

Cables: HD, CDROM, Floppy, Clock Port Data and A1200 HD power

CAB-PD-40F44F	2.5" (44F) to 3.5" (40F) data cab adapt for A1200	9.95
CAB-PD-2F	Power splitter floppy drive to hard drive + floppy	9.95
CAB-PD-30C	44->40way 3.5" HD data & pwr cabs -A1200	14.95
CAB-HD-KIT	A1200 full 3.5" hard drive fitting kit	24.95
CAB22-2W-9C	22way-Fx2 A1200 clock port cable 9cm o/a	5.00
CAB34-2W-50C	34way-F x2 FDD ribbon cable for tower	9.95
CAB40-2W-20C	40 way IDE cable 2 connector 20cm	5.00
CAB40-3W-1M	40Way IDE/HD/CD cable 3 connector 1m o/a len	9.95
CAB40-3W-60C	40w-F x3 HD/CD/IDE cable 20+40=60cm o/a	9.95
CAB40-CUST	Custom cable 3x40way IDE up to 1.5m	19.95
CAB44-2W-13C	44way (2.5" HD) cable 2 cntr, 13cm o/a	9.95
CAB44-2W-60C	44way (2.5" HD) cable 2cntr, 60cm o/a	19.95
CAB44-3W-12C	44way (2.5" HD) cable 3 cntr, 12cm o/a	12.95
CAB44-3W-24C	44way (2.5" HD) 7+17cm,3 cntr,24cm o/a	14.95
CAB50-CUST	Custom cable 3x50way IDC SCSI + 1xCent50-F 60cm	19.95

Cables: HD, CDROM, Floppy Power Splitters - Tower Systems

CABPW-1W-1F	Power converter cab HD-M -> FD-F	4.95
CABPW-2W-1H1F	HD/FD pwr splitter HD-M->1xHD-F/1xFD-F	6.95
CABPW-2W-2F	FDD power splitter 4pM->2xFD-F	6.95
CABPW-2W-2H	HD/CD pwr splitter 4p-M ->2x 4p-F 15cm	6.95
CABPW-3W-2H1F	HD/FD pwr splitter HD-M->2xHD-F/1xFD-F	8.95
CABPW-3W-3H	HD power splitter HD-M -> 3xHD-F	8.95
CAB-HD-PWXTN	4p-M -> 4p-F HD/CD power cab ext 0.9m	9.95
CAB-HD-FD/4	23p-M-floppy -> 4p-F HD/CD pwr 0.9m	9.95

CDROM Systems including EZ-Tower & MT/DT Bundles

CD-CP-20X-SE	CDPlus-SE system 20 speed with CDROM s/w	85.95
CD-CP-32X-SE	CDPlus-SE system 32 speed with CDROM s/w	98.95
CD-DT-20X	CDPlus Desktop 20 speed with CDROM s/w	109.95
CD-DT-32X	CDPlus Desktop 32 speed with CDROM s/w	129.95
CD-FT-20X	CDPlus EZ-Tower 20 speed with CDROM s/w	189.95
CD-FT-32X	CDPlus EZ-Tower 32 speed with CDROM s/w	209.95
CD-MT-20X	CDPlus MiniTower 20 speed with CDROM s/w	119.95
CD-MT-32X	CDPlus MiniTower 32 speed with CDROM s/w	139.95
CD-PL-20X	CDPlus Gold system 20 speed w/ EZIDE s/w	149.95
CD-PL-32X	CDPlus Gold system 32 speed w/ EZIDE s/w	169.95
ADPT-AUD-CDSE	CDPlus-SE A1200/CD audio mixr/adapter	19.95
ADPT-CDPL-PWR	CDPlus-Gold external power skt + HD pwrcab	9.95
CAB44-CD-13C	44way (2.5" HD) cable sold with CD/HD 13cm	6.00
CAB40-DDC	A1200 IDE skt adptr 40F-40M with mtgs 15cm	9.95

CDWriter Systems including EZ-Tower & MT/DT Bundles

CDR-UG-2x8	EZWriter 2/8x w/MakeCD for A4k,Twr	249.95
CDR-PL-2x8	EZWriter-Gold external 2/8x w/MakeCD	299.95
CDR-PL-2x8-SE	EZWriter-SE external 2/8x w/MakeCD	279.95
CDR-DT-2x8	EZWriter Desktop 2/8 speed w/MakeCD	299.95
CDR-MT-2x8	EZWriter MiniTower 2/8 speed w/MakeCD	299.95
CDR-FT-2x8	EZWriter Full EZ-Tower 2/8 speed w/MakeCD	379.90
CDR-CDSE-UG	EZCD-SE+40+44way cabs + CDROMs/w w/CDR	20.00
CDR-CDM4-UG	EZCDMk4+40+44way cabs + EZIDE s/w w/CDR	30.00
CDR-DSK-10	Recordable CD media (WORM) 74 mins x10	19.95
CDR-DSK-10-SP	Recordable CD media 74 mins x10 pur w/EZWriter	19.95
DVR-MCD-TAO-P	MakeCD TAO (P) Amiga CD rec s/w w/ATAPI	38.95

EZ-Tower Systems, MiniTower/Desktop Cases & Accessories

CASE-FT	Full PC Tower, 250W PSU, modable for A1200	49.95
CASE-FT-1200	Full A1200 Tower 250WPSU,LED adpt,FD cab	99.95
CASE-FT-EXKT	EZ-Tower conversion kit - No PC Tower	39.95
CASE-FT-KIT	EZ-Tower kit w/ bkpnl for self conversion	79.95
CASE-FT-PLUS	Full A1200 EZTWR, EZKEY i/f, PC kbd	138.95
CASE-DT	Desktop case with 200W+ psu for HD/CDROM	29.95
CASE-MT	MiniTower case with 200W+ psu for CD/HD	29.95
ADPT-AUD-EZTW	EZTwr audio mixr/adapter for A1200/CDROM	19.95
ADPT-SCSI-EZTW	EZTwr SCSI adpt 30cm 2xCent50F, 1xIDC50F	19.95



CAB-SER-SSQ	9pDM->9pDF SurfSq EZTwr ser extn cab 50cm	9.95

SVGA Monitors - require Scandoubler and/or Flickerfix to use all Amiga modes

MON-14-28	14" dig SVGA 0.28DP 1024x768@60Hz - 3yrO.S.	98.95
MON-15-28	15" dig SVGA 0.28DP 1024x768@60Hz - 3yrO.S.	128.95
MON-17-28	17" dig SVGA 0.28DP 1280x1024@60Hz - 3yrO.S.	248.95
MON-17-26	17" mon 135MHz, 0.26DP 1600x1280@75Hz	399.95
ADPT-MON-SESD	EZVGA-SE ext s/dblr non-u/g'able pur w/ mon'r	45.00
ADPT-MON-SEFF	EZVGA-SE ext flickerfixer purch w/ monitor	80.00
ADPT-MON-M2SD	EZVGA-Mk2 ext s/dblr u/g'able pur w/ monitor	60.00
ADPT-MON-PLFF	EZVGA-Plus ext flickerfixer purch w/ monitor	99.95
ADPT-MON-INSD	EZ-VGA internal s/doubler purch w/ monitor	45.00
ADPT-MON-INFF	EZ-VGA internal f/fixer purch w/ monitor	80.00

Digital Cameras and Amiga Digital Camera Software

CAM-FUJ-DS7	Fuju DS9 cam, psu, LCD disp, mem crd w/ s/w	259.95
DVR-CAM-CAS	CamControl s/w for Casio QV10/100/300	29.95
DVR-CAM-FUJ	CamControl s/w for Fuji DS5/DS7	29.95
DVR-CAM-KOD	CamControl s/w for Kodak DC20/DC25	29.95
DVR-CAM-MIN	CamControl s/w for Minolta Dimage V	29.95
DVR-CAM-OLY	CamControl s/w for Olympus 420L/820L/1000L	29.95
INT-12I-PTJR-SP	PortJnr hi-speed ser i/f pur with CamControl s/w	30.00

Amiga CDROM, CDWriter, IDE/ATAPI, Printer, Scanner & Video Software

DVR-EZIDE	EIDE/ATAPI HD/CDROM/ZIP/LS120/SyQst drvr	34.95
DVR-EZIDE-CU	P/x upgrade to EZIDE from compet product	19.95
DVR-EZIDE-SP	EIDE/ATAPI enhancer/CDROM s/w bundle pri	16.95
DVR-MKCDP	MakeCD(P,TAO) Amiga CD writing s/w	38.95
DVR-SQ3	ScanQuix3 w/ 1 Amiga scanner driver	59.95
DVR-PHS	PhotoScope UMAX-SCSI Amiga scanner driver	59.95
DVR-ENPR	EnPrint. Amiga printer dvr for pre 03/97 Epsons	9.95
DVR-TBPR6	TurboPrint 6.x Amiga printer driver English	38.95
ADPT-SQ3-PAR	SQ3 adapter Epson scanner->par prt cable	9.95
CAB-PAR-FULL	Bidirectional printer cable all pins connected	9.95
SCN-FBA4-BDL2	UMAX award-w'ing SCSI A4FB scanner w/ s/w	179.95

Hard & Floppy Drive, CDROM, LS120 & Zip Mech. & Cases

CD20-BARE	Bare 20 speed CDROM mechanism for twr/A4k	39.95
CD32-BARE	Bare 32 speed ATAPI CDROM mechanism	48.95
FDD-ITL-1200	Replacement A1200/600 int FDD 880KB	24.95
FDD-ITL-BARE	Bare 1.44/880 FDD for tower (needs i/f)	19.95
FDD-ITL-D/C/I	Twr int 880Kb FDD(Sony/EZDF0/cab bundle)	34.95
FDD-ITL-D/I	Twr intl 880Kb FDD (Sony/EZDF0) No cable	29.95
HD2-21	21MB 2.5" hard drive 90 days warranty	29.95
HD2-170	170MB 2.5" hard drive	69.95
HD2-540	540MB 2.5" Hard Drive	89.95
HD2-720	720MB 2.5" hard drive	99.95
HD2-1.4	1.4GB 2.5" hard drive for Amiga	139.95
HD2-1.8	1.8GB 2.5" Hard Drive	169.95
HD3-2.1	2.11GB 1"x3.5" non-InstantDrive for twr	99.95
HD3-2.5	2.56GB 1"x3.5" IDE HD TowerDrive - Amiga	114.95
HD3-3.2	3.2GB 1"x3.5" IDE drive for tower	129.95
HD3-4.3	4.3GB 1"x3.5" IDE drive for tower	149.95
HD3-LS120	Panasonic LS120 floppy/optical 1.4/120MB	79.95
HD3-LS120-CT1	Single 120 MB cartridge for LS120 drive	14.95
HD3-LS120-CT3	3-pack of 120MB (nominal) LS120 carts	34.95
HD3-ZIP-CT1	Single 100MB (nominal) Zip cartridge	14.95
HD3-ZIP-CT3	3-Pack of 100MB (nominal) Zip cartridges	34.95
HD3-ZIP-IDE	Bare ATAPI/IDE Zip drive internal	79.95
CAB44-CD-13C	44way (2.5" HD) cable sold with CD/HD 13cm	6.00
CASE-ZIP	Metal slim case-FDD/IDEZip/SyQuest/LS120	9.95
CASE-HD-ECON	External 3.5" HD case no psu	19.95
CASE-HD-REM	Removable drive case for 3.5" HD (metal)	24.95

Keyboards, Mice, Trackballs, PSU's, misc h/w & s/w

FAN-60MM	Cooling fan for A1200 60x60x25mm 5/12v	14.95

New products & special prices for this issue

EZ-Tower+PC kbd+kbd i/f - £138.95; Fuji DS7 £259.95 (over 50% Off!); 14" monitor+scandoubler £143.95; EZWriter-SE external CDROM burner+MakeCD £279.95; Scandoubler with full flickerfixer (int or ext) £89.95; Elbox IDE-Flyer high-speed 4 dev buffered i/f £59.95; CamControl digital camera software £29.95; Award winning Umax SCSI scanner w/PhotoScope s/w £179.95

KBD-A1000	A1000 keyboard with 6-pin mini-Din cntr	39.95
KBD-A1200	Replacement A1200 k/b w/ribbon cable	24.95
KBD-A4000	A4000 keyboard with 6-pin mini-DIN plug	34.95
KBD-WIN95	Windows 95 keyboard with 5-pin AT DIN plug	19.95
MOD-EXT-14	Modem AT 14.4dat/14.4 fax+EU psu/tel cab	19.95
MOU-WHI	Amiga mouse - white/cream - with mousemat	6.95
TKB-AM	Amiga trackball 3-button replaces std mouse	14.95
PSU-100	100w PSU for Amiga (fit your old lead - excl cntrs)	29.95
PSU-200	200w PSU for Amiga (fit your old lead - incl cntrs)	39.95
PSU-230	230/250w replacement PSU for MT/DT/FT	29.95
PSU-A1200	A1200 23W PSU (original) 90 days warranty	19.95
SPK-16W	16W PMPO speakers w/ PSU 3.5mm jack	10.95
SPK-60W-INT	Internal mounting 60W PMPO speakers/amp	24.95
VID-CKT	Cocktel Amiga videoconferenc'g s/w by ProDad	39.95

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EYETECH

ON THIS MONTH'S CD

AFCD31:-ReaderStuff-/-ReaderGames-

Sometimes you can almost see the sticky-backed plastic holding these things together. They are, of course, the...

Reader Games

Think of your favourite game for a minute. What's it got that makes it so special? Can you lose yourself in it? Do you fail to notice the passage of time? Does everything else somehow seem to be not quite so important all of a sudden? Do you wish you'd written the game and enabled thousands of people to enjoy it as much as you do?

If your favourite game is any good then you'd have answered yes to all of the above. Someone, after all, had to come up with the game in the first place, and if they've had a terrific idea then you could too.

Welcome to Reader Games, the section of *Amiga Format* that attempts to get those creative juices flowing and encourages gamers to produce what could well turn out to be The Next Big Thing.

As most of the previous Amiga stars are now directing their talents at other machines, the time has come for the new stars to come to the fore. Those new stars are you, and here's where you get to show the world that you know a thing or two when it comes to gameplay.

We're not concerned with fabulous-looking games here. We don't even care if they sound awful as all we're after is the kernel of good gameplay around which those cosmetic qualities can be built. We simply offer advice on how to make the games better.

What we don't do (usually) is rip games apart and hold them up to ridicule. We all want to keep playing good games and the games of tomorrow are likely to come from a talented, enthusiastic amateur.

There's a £50 prize for the author of the month's best game, so there's even a financial incentive to get you in front of the keyboard. Read through this month's selection and as soon as that inspiration hits you, get those fingers moving. Onwards...

£50 AF Winner!

THE ARENA

Matt's first person perspective action adventure is easily this month's winner. Armed with an array of weapons (mini-gun, shotgun, sword and so on) the idea's to work your way through the game's sectors by solving little puzzles, à la *Hired Guns*. There are baddies to shoot, switches to throw, lifts to take and teleports to jump into.

The graphics are a little crude and a bit jerky because Matt has employed the jump screen technique, whereby turning and moving happens in jumps rather than smooth scrolling, but once you've got used to that it's easy enough to work out where you're going.

However, it's a little easy to unwittingly fall off platforms. If you press forward a couple of times, the computer takes a short while to think about it before stepping you forward twice and right off the end of the platform, take your time moving around!

The baddies are not the most intelligent of creatures and it can be annoying when they keep hopping in front and then to the side of you and then back, so getting your timing right with your weapon can be tricky. You're given a list of objectives that need to be completed to reach each of the sector's exits and everything has to be done within a time limit. This is just about right for each sector; not too loose and not too tight.

There's extra ammo, health bonuses and key cards to pick up and though the sectors are all small, they can be devious, not least because it's a little disorientating as there's not much depth to the graphics. You can be walking towards what appears to be an open space



when you take another step forward to suddenly find that there's actually a huge wall in front of you.

These quirks aside, *The Arena* is a whole lot of fun. It could have been smoother, it could have looked better but the basic gameplay's solid. Even though there are some annoying bits (hit a lift switch and fall off a platform and there's no way of reactivating the switch so you have to start the sector over again), it generally hangs together really well.



Loading up, and those aren't rubber bullets. The blood flows in the highly commendable Arena.



AUTHOR: Matt Ward
LANGUAGE: Amos Pro
VERDICT: A great puzzle/action/adventure game that doesn't look great and is far from smooth but plays well and will keep you entertained for some time.

READER WARRANT

When you're sending in your submissions make sure you also give us:
1. An address where you can be contacted.
2. Details of the language used to create the game.
3. A recent photo of yourself.
The address to send your stuff into is:
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Everything included on the *AFCD* must have a reader warrant with it. Just cut it out off this page, sign it and send it in to us with your game and a recent photograph of yourself. A last reminder: if you don't include this warrant we simply won't be able to put your game on the CD – that means you won't be able to have it judged by other readers.

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COLOUR X



Murderously difficult when you first try it, Colour X should keep you cussin' for a good few minutes.



Here's a tricky little game that's a lot harder than you might first imagine. Click the mouse button at the bottom of the screen and four coloured words flash up briefly on the screen in sequence. All you have to do is press the first letter of each colour you see. Get 'em all right and you can move onto the next set of four. Simple, eh?

Er, no. Mark's been deviously clever here. Suppose you see red, then blue, then blue and then green. It would be simple enough to type in RBBG and get it right, except the coloured words you see are, well, colours.

Imagine the first word up is red, except it's written in blue. The next one is yellow and this is written in red. You get the picture.

It's surprisingly tricky to do because the words flash up so quickly and there is obvious confusion when you see the word blue written in red.

OK, so it's a nice idea to start with, but the implementation could have been a lot better. For a start, Mark gives us 100 goes and that's far too many. The game's also too sensitive to mouse clicks as you can enter the right colour combination and click the mouse to see the next sequence only to be told you're wrong as it seems to think you've already had another go.

Maybe some kind of points system could have been implemented (and my apologies to Mark here if there's some kind of score system at the end because I have to admit I didn't go through the whole 100 goes whenever I played it) and maybe clicking on coloured icons rather than having to type in the sequence every time would have been easier.

AUTHOR: Mark Moran
LANGUAGE: Blitz Basic 2
VERDICT: A devilishly tricky memory game that lets itself down with one or two presentation errors. Too many goes per game as well.

ARMCHAIR ASSASSIN 2

Simon's no stranger to Reader Games because this is the second version of this game he's submitted to us (as well as submitting it to our CD contributions section – don't think we didn't notice!). The game is simplicity itself and it's a right laugh too.

Armed with a variety of weapons, from shotguns to mini-guns to photon torpedoes, all you've got to do is waste the little characters that run around the screen. Simple, bloodthirsty fun. There are a couple of new additions to this version of *Armchair Assassin*, the first being that if you shoot someone in the head you only wound them and they wander around the screen dragging a bloody leg (don't ask me why) and if you shoot them in the body they explode in a mess of blood 'n' bones.

Once you've wasted all the characters (and you want to do it in as little time as possible to get onto the high-score table) you get the chance to shoot their heads around the screen. Again, don't ask me why.





Mindlessly violent and gory good fun – I've got no idea what this head-kicking-around business is about but it's a giggle all right.

Cunningly, Simon's added a character creation program that allows you to add your own little characters, so if Mr. Briggs from Maths has been really getting on your case lately then it's time to teach a few hundred pixellated versions of him a lesson. Good stuff.

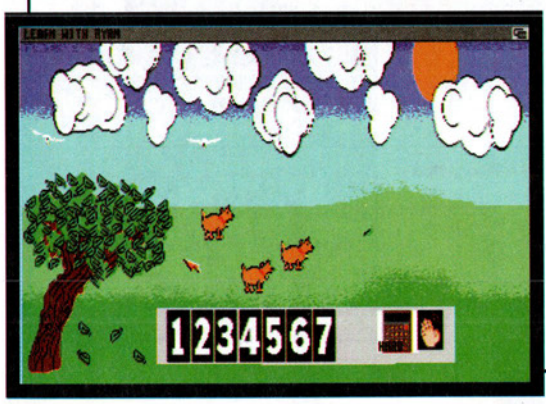
The sound effects are great, the animation's funny and all in all this is a great little stress reliever. Personally, I don't see much point in the head shooting business, but the rest of the program's well done and well presented.

Armchair Assassin is mindlessly violent but it's a good giggle nonetheless.

AUTHOR: Simon Hitchen
LANGUAGE: Unknown
VERDICT: Updated and improved, this a lovely little time-wasting program. Maybe we can have some of them shoot back for version 3?

LET'S COUNT

Education is a wonderful thing (though how would I know?) and here's a little game that's been designed to improve some toddler's counting abilities.



Depending on the difficulty level chosen, you're presented with up to seven randomly placed animals (sheep, cats, pigs and so on) around a field on screen and then you're asked how many are present. Choosing the correct number is easy enough: simply click on the right number on the bar at the base of the screen. Get it right and you're rewarded with a Fred Flintstone "Yabba dabba doo!". Get it wrong and you're treated to an "Oh dear, that wasn't right".

And erm, that's all folks. The speech is well done, the graphics are bright and cheerful and I can see your average four year old finding this entertaining for a few minutes. I do think that it's lacking enough variety, though. As well as animals, why not have objects? Why not have different backgrounds too?

Click on the right number and wait for the next bunch/group/flock/herd or whatever of animals. Easy, eh?

Children's attention spans are notoriously short so you've got to keep them entertained while they're learning, and with the same animals on only one background, I can see little Johnny finding it all a little dull.

Well put together but needing more for it to be a really effective tool, and why just up to seven? What's wrong with up to 10?





AUTHOR: Mark Sudlow
LANGUAGE: Blitz Basic 2
VERDICT: Nicely done but too limited to keep a child interested for very long. More variety is required for this to be as effective as it could be.

GameBusters

Getting Quake to run faster part 2

Gareth Murfin shares some Quake tips and cheats while Andy Smith introduces you to a new walkthrough for Uropa 2.

ON THIS MONTH'S CD

AFCD31:-In_the_Mag-/Quake

After last month's guide to speeding up *Quake*, I will assume that you now have *Quake* running at an acceptable rate and that you are acquainted with the game itself. This month it gets even more technical, so if you're a beginner, take your time and use the examples on the cover CD.

Controlling yourself

Quake features a true 3D environment which means you can't use a simple control method like you can with *Doom*. The best way to win in both single and multiplayer mode is to use the mouse and keyboard simultaneously. Usually the mouse is controlled by your right hand and the cursor keys by your left hand.

> "Aliases allow you to attach a whole string of commands to one word, which can then be binded to a key."

I recommend you change the *Quake* default settings to the following: freelook on, lookspring off, lookstrafe off. This will allow you to freely look around the rooms using the mouse.

Now change the mouse sensitivity to about 15, as this allows fast 360 degree rotation so you can kill people who decide to creep up on you. Now go to 'Customize controls' and make sure you have the following set up:

Attack	Mouse 1
Jump/swim up	Enter
Walk forward	Up arrow or mouse 2
Backpedal	Down arrow
Step Left	Left arrow
Step Right	Right arrow

Configuring your control method like this will make things a lot easier because you can freely look round rooms, sidestep and run or fire without having to look down once. I recommend using sidestep a lot to dodge oncoming gunfire instead of trying to backpedal and run.

You should also remember that the 'Help' key zooms in on the opposition so you can accurately hit them even if they are in the distance. If you are using a PC keyboard then the help key should be 'Page Down'.

The Console

Quake features a 'Console' which allows you to access otherwise inaccessible commands and normal commands more quickly. Think of the console like a Shell in Workbench – it even features tab completion of commands and a command history.

To bring up the console, press the tilde key (~). Here are some useful Console commands:

Record <demoname.dem><map> [track] – Records your own *Quake* demo with optional CD audio track. For example, Record AF.dem E1M1 5.

Playdemo <demoname.dem> – Plays back *Quake* demos. For example, Playdemo AF.dem.

Kill – Kills your character, in case you're trapped somewhere.

Ping – Use this in net mode to see the speed of everyone's connections – the higher your ping, the slower your connection is.

Screenshot – Takes an exact screenshot of your current *Quake* game and saves it as Quake00.pcx. (Use *PPaint* to view pcx files. The full version of *PPaint 7* was included on *AFCD26*.)

Crosshair 1 – Turns gun crosshair on for aiming (crosshair 0 to switch it off).

Impulse <1-8> – Will swap to a different weapon: 1 is shotgun, 8 is Thunderbolt.

+attack – Makes you constantly fire your current weapon until -attack is entered into the Console.

Bind <key> <command> – Attaches a command to a key. Bind R "+impulse 7" means pushing 'R' swaps your current gun to the rocket launcher.



Think of the console as an Amiga Shell.

Bindings and aliases

Binding is a great function of *Quake* as it allows you to attach long, tedious commands to one key on the keyboard. This allows you to perform long-winded functions in seconds.

Aliases allow you to attach a whole string of commands to one word, which can then be binded to a key. Here are some examples of possible bindings and aliases:

bind S "save AF" – Binds 'S' so you can save your game as *AF* by pressing S at any time.

bind D "Record AF.dem E1M1 5" – Binds 'D' so that you can record a demo by pressing D.

Alias rocket "impulse 7; +attack; wait; -attack; impulse 3" – This alias will make you get out your rocket launcher (impulse 7) then fire a shot (+attack) then swap back to the shotgun (impulse 3).

Bind R "rocket" – This binds R to the Alias 'rocket'.

Fixing a Save Game file

Every once in a while, *Quake* will crash. If it happens to crash while you're trying to save your game then it could corrupt the data so your save game won't load any more. This could mean losing hours of play and having to start all over again. However, there is a solution.

Make a backup of the save game file and keep it somewhere safe. It will be in Quake/id and you will recognise it by the SAV prefix on the end. Load the save game file into a decent text editor such as *GoldED* or *Blacks Editor*. Go to the very end of the text file and find the last characters. If there is no " on the end, add one manually.

Now you need to add the closing brackets, so you must add underneath the last line } { } each on a separate new line. The corrupt save game file could look like this:

```
"absmax" "-223.000000
1361.000000 -87.000000" "origin"
"-224.000000 1360.0000
```

After fixing, it should look like this:

```
"absmax" "-223.000000
1361.000000 -87.000000" "origin"
"-224.000000 1360.0000" } { }
```

Now *Quake* can understand the save game file again, although it isn't 100% fixed. You must play the game until you finish the current level before you save again so *Quake* can generate the missing data itself.

Customising the Introduction

As soon as *Quake* starts, it plays an introduction showing you how to play the game. This is quite good but it gets boring after you've seen it a hundred times, so wouldn't it be good if you could make your own introduction? Here's how.

First you need to record your own *Quake* demo, as described earlier. Record an interesting demo and then fire up your favourite text editor again and make a simple text file with the following text in it:

```
// $VER: autoexec.cfg
startdemos <demoname.dem> demos
```

Now save this file as autoexec.cfg in Quake/id1/. If this file already exists, simply add the words to the bottom of the file. Now load up *Quake* and voila, you have customised the introduction. It even returns you to the Console afterwards so you can start a game.

If you want to make your introduction play behind the main menu instead, just add 'menu_main' to the bottom of the script.

Next month we'll have an in-depth look at playing *Quake* deathmatches on the Internet and we'll look at how to make scripts that will help you win.



Bored of the Quake introduction? Why not make your own?

CHEATS

Like all id Software games, there's plenty of cheats. Here's a selection of the best (they will only work in single player mode).

God – You can't be killed (on/off).
Fly – You can fly (on/off).
Impulse 9 – Full weapons and ammo.
Impulse 255 – Quad Damage.
Impulse 11 – Gives you a Rune.
Noclip – Walk through walls.
Notarget – Monsters don't shoot you until you shoot them.
Give <S/N/R/C/H> x – Gives you x number of: S=Shells; N=Nails; R=Rockets; C=Cells; H=Health Points.
Give x – Gives you weapon x (1 to 8).
Map EeMm – Skip level; e is the episode number and m is the map number (for example, MAP E1M1).
Sv_gravity <1-3500> – Changes gravity: 1 is low, 3500 is high.
Sv_friction <1-1000> – Changes the friction: 1 is low, 1,000 is high.

Rocket jump cheat – There are some secret rooms in *Quake* which cannot be reached by normal jumping, so you must use a special technique called 'Rocket Jumping'. This involves aiming the Rocket launcher at your feet and running forwards. You then jump and when you are about to reach the peak of the jump, fire the rocket launcher directly down while still pushing forwards. This will result in you being thrown up into the air much higher than a normal jump so you can get to the really secret rooms. Be careful as you will lose about 50% of your health. It's better to practise first in one player mode using infinite weapons and health. There's a *Quake* demo file on the CD showing you how to do this.



Rocket jumping can be fun, but it's dangerous!

SECRET DIFFICULTY SETTING

***Quake* has literally hundreds of secrets and I couldn't begin to explain them all here, but this one is excellent as it will keep you playing *Quake* for a lot longer. It's a completely new skill level, aptly called Nightmare. It really is just for advanced *Quake* users because it's very difficult. To access it you must do the following:**

Walk through any of the three halls and proceed to the entrance of the fourth episode. As you drop through the pool, keep as close to the side as possible and pull backwards. If all goes well you will land on a high, narrow beam which leads round to a door on the left. Go through the door and you'll find a teleporter. Just before you enter this, shoot the button on the wall. This will give you access to another secret level later on in the game. There's a *Quake* demo file on the CD showing you how to do this.



Nightmare level is only for Quake experts.

continued overleaf ➡

Helping Hands

SHADOW OF THE BEAST III

Dear Amiga Format,
Can you help me with Shadow of the Beast 3 from Psygnosis, please?
Ben Koljonen, Sweden

Okey dokey. On the title screen, type DADDY DRAW THIS FOR ME and hit return. The shuriken should turn into a smiley face with some letters under it.
During the game, use the right cursor key for invincibility and the left cursor key to return things to normal. Hope that helps you out.





You might think things are tough, you might think things are hard but they're not when you're invincible!

FLIGHT OF THE AMAZON QUEEN

Dear AF,
In Flight of the Amazon Queen, when using the vacuum cleaner to clean the dust off the floor to match the embossed markings to the wall, I had no luck. Can you help me?
M. White, Grimsby.

Erm, not really. You should actually use the vacuum cleaner to suck up the wasps in the jungle and you should then give it the witch doctor later on, along with the coconut.



Yep, every last little pixel of her. I say, madam, care for a bag full of wasps?

Uropa 2



Level 1

Enter the base of Castalia and travel to the research room. Download information which tells of the research about metamorphing the Tekite shape to the Commander shape through the programming of the Transport Computer. Go to the storage room next door and search it in order to locate the program instruction chip.

▼ This room has a Kapone in a cabinet. If there is not too much delay, the Kapone will not turn and notice you. If you're seen, you must destroy the Kapone before leaving this part of the base.

▼ Continue to search section one of the base and you'll locate a credit card on a dead colonist, an ammunition clip and an autofire weapon enhancement. Another room will contain some colonists. Lead these folk back to the main transporter room and transport them to the Elderado Station.

▼ There's a Timed Explosive Device (TED) in the workers' quarters which is needed to gain access through the security door. Both security rooms are level 0, which means once you gain access to the first by using the TED, you 'll be able to get the access code to use on the second. Don't fret if you mess up because there's a base card in the second section that allows you access to all of the security rooms in the base.

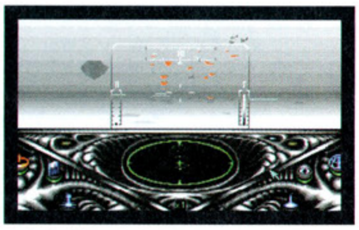


▼ Go back to the transporter room and insert the instruction chip into the transport computer. Transport to the Translink room 1 and you'll change to a Kapone Commander. You will have approximately 12 minutes to destroy the Comms room before the morphing wears off and you're a Tekite again.

▼ Locate the supply room and buy a detonator. Search the Armoury and locate the high explosive hidden behind some blocks. Join the high explosive to the detonator to form a primed explosive. This will need power applied to the detonator to make it explode.



There you go. With the security code for all level one doors, moving around's going to be a lot easier.



Don't do things the hard way on the surface of a planet – read the tips and discover how to sneakily bypass the hard bits.

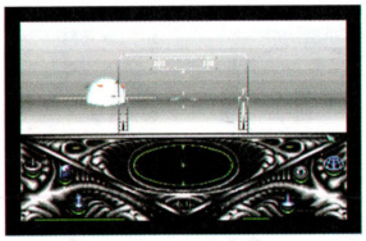
▼ Take these to the Comms room. On the way to it, you should locate a corridor with a switch. This needs to be turned off as it powers the communication device in the Comms room. Go to the Comms room and insert the primed explosive in the comms device.

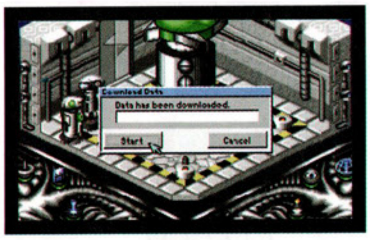
▼ Return to the corridor and throw the switch. The Comms room should be destroyed. Now find the real Commander and kill him. There's a lockup key being carried by a Kapone in this section which is required to free the locked colonists. Rescue them and that's the first level done.

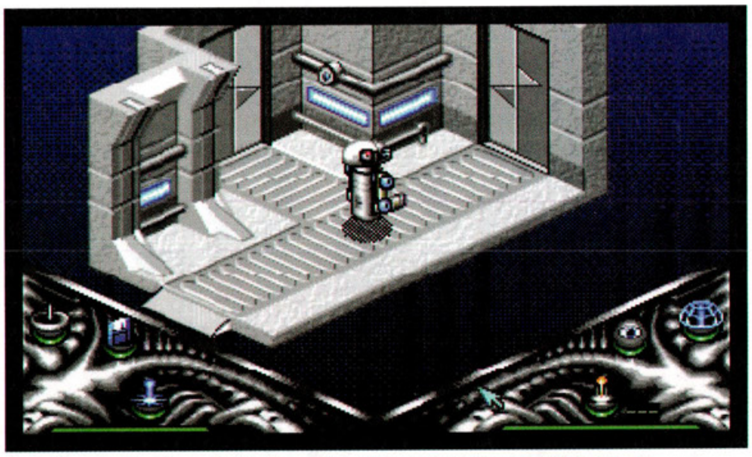
Level 2

Before starting this mission, you should buy as many LS1200 or HG0500 missiles as possible from the Hovar supply computer in the Elderado foyer. The foyer is located in the Elderado Station and is accessed by either F3 or the mouse.

▼ From here, transport to the surface and locate sector 60:07, killing enemy ships along the way. Once you have reached this sector, slow down. There are four enemy missile turrets on the







Uropa 2 has great tension and atmosphere – if you know what you're supposed to be doing!

far outskirts, surrounding the base. There are five communication towers that need to be destroyed and the only way to take them out is with your missiles.

▼ To do this you need to select missiles and target each tower one at a time. Quite a few missiles are needed to penetrate a tower's shields.

▼ One way to do this is to travel into the centre of the base near the middle building and stop. You will be just out of range of the missile turrets and you can target the four outer towers. You will need to move out to target the central tower (avoiding all the incoming, of course). Once you've done this, you're ready to go back underground.

Level 3

You start this level in base Aurora. Make your way south to the supply room that contains numerous colonists in hiding. Walk back to the main transporter room and wait for them to file in. Select the 'starship' option on the transporter and wait for them to be transported.

▼ Now transport yourself to the first translink room. Search the box at the back of the room to get a TED. Transport back to the main transporter, then west towards the first security room. Use the TED to blow the security door, then go in and access the security computer to get the access code and also to unlock the doors.

▼ Now go north and enter the colonist's room to the west of the first foyer. Search the bed with the dead colonist on it and collect the credit card. Go east, then north and turn east after reaching the hydroponics room. Continue north and enter the room east of the next foyer. Destroy the Kapone here and pick up the weapon container it'll drop. You now have a gun.

▼ Go west and pick up the hidden hologram projector on the north wall. You need to take out the Kapone commander to get a base card, so be careful. Once in the commander's room, search the bed to find an empty fuse. Travel south and then west to find two colonists.

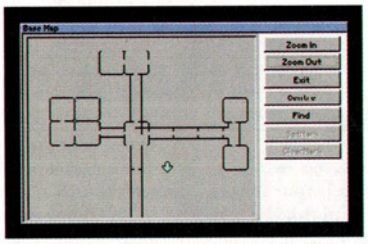
▼ Make your way back to the first foyer north of the security room. Tell the colonists to stay there. Enter the security room to the east and then go out of the north exit. Travel until you get to the lockup and rescue the colonists. Travel back to the foyer and then to the main transporter and transport the colonists to the starship.



▼ Now go to the supply room to the south and buy a 100amp fuse wire with the credit card. Now, using the inventory window, drop the fuse wire on the empty fuse and you'll have a complete fuse. Go west past the first security room until you reach the second security room. Enter the room to the south, destroy the Kapones and pick up the control key. Head back to the first security room and then south to the T-junction. Enter the control room to the west.

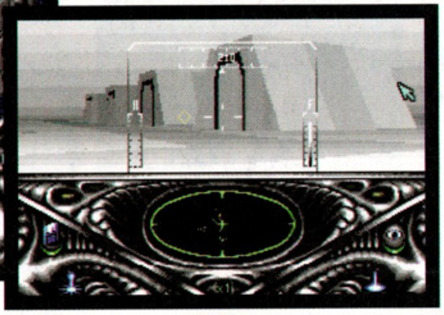
▼ Read the number on the key via the inventory and use that number to access the computers. Examine the generator to find the power fault. Head east to the reactor room and insert the fuse into the generator. Head back to the control room and enable the generator.

Note: There is an armoury room to the east of the security room that is near to the lockup. You should go back there after gaining your credits and spend them on some better weapons or ammunition.



The in-game map's a terribly handy feature that you'll be using time and again.





Your droid teleports to another location and prepares to give those Kapone's a fright.

Helping Hands

FLIGHT OF THE AMAZON QUEEN (AGAIN)

Dear Amiga Format,

I'm completely stuck on Flight of the Amazon Queen. I don't know what to do once I've got the combination to the safe. Can you help?

E. Cartwright, Derby

Once you've opened the safe, look inside it. Then go to the hut with the dog guarding it and use the key on the padlock. Get the rocket pack and walk to the Amazon fortress. Go to the jetty and talk to Charon. Give him the beetle and tell him that you want to go to Sloth island. You can take it from there...





Obviously this guy's an ornithologist (and with an ology he must be a scientist!).

SEND US YOUR TIPS!



If you've got some hints, cheats, tips or general good advice on any Amiga games – especially some of the newer ones like Genetic Species, Foundation or whatever, then don't keep them to yourself – send them in so we can pass 'em on to other gamers out there who might be having more problems than you.

Also, if you've got a query about a game (and no, I don't really mind people asking about The Secret of Monkey Island), then drop us a line and we might be able to answer it in Helping Hands.

HELPING HANDS • Amiga Format
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PD Select

Dave Cusick casts an inquisitive eye over the latest batch of PD and Shareware gubbins.

Beat Box 2

BY: James L Boyd and Curt Esser
WARE: Share
PD LIBRARY: Classic Amiga Software
NUMBER OF DISKS: One
PRICE: £1 + 75p P&P

Beat Box is an easy-to-use music program, designed to enable those who can't fathom out sound-trackers and their hex number systems to sequence tunes using four tracks of IFF samples. The original release made it onto the *AF* cover CD last year; now the authors have drawn on their increased experience with *Blitz Basic*, in which the program was created, and they have released a new version with fewer bugs and several additional features.

Once you've got the program up and running (which will involve copying a font across onto your hard drive, and probably also changing the program preferences so your Amiga won't try to use the nasty interlace screen mode which is set as the default mode), you'll be confronted with half a screen full of boxes and a selection of buttons. You can place icons representing sound samples into the boxes.

The program makes use of a block system so that 16 samples can be inserted into one block, and blocks can be sequenced. It's essentially the same system that trackers use, but it's rather less daunting to the beginner and the blocks are slightly smaller.

The sequencing process consists of picking the blocks you want to comprise your tune from one listview, whereupon they appear in another listview.

While the interface isn't the most advanced you are ever likely to see, it does the job quite adequately and ensures that you won't need to be a rocket scientist (to use a nasty Americanism) to get the thing working.

If you want to produce sophisticated compositions then *Beat Box 2* is going to

PLASMA BUBBLE

This is another one of those games that first appeared several years ago, but has recently started reappearing in PD libraries thanks to it having a dedicated page on its author's web site (in this case, http://www.meta.demon.co.uk).

You've been given a plasma bubble – a state-of-the-art transportation device. While the bubble protects you from most elements, it's not advisable to let it come into contact with iron, because this particular element will mess around with the delicate balance of gases which power the vehicle (or so it says here), leading to a rather large explosion. Your task is to explore various mazes in your plasma bubble, collecting treasures along the way.

Essentially, all this talk of a plasma bubble is just the author's elaborate attempt at kidding you into thinking you're playing something other than yet another *Boulderdash* clone, but unless you were at the back of the queue when the brains were dished out, you'll immediately see the game for what it is.

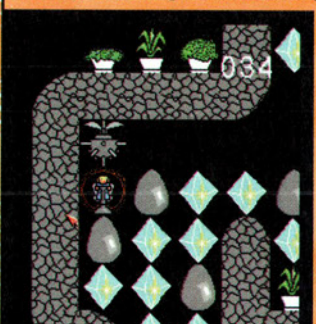
To be fair, it's certainly not the worst *Boulderdash* clone I've ever set eyes on. The first few levels are very straightforward and ease players into the game gently, but some of the later stages will have even the most experienced arcade puzzle veterans scratching their heads.

The game makes use of a password system, which is just as well when you consider that it boasts over 100 levels, divided into five difficulty levels – you won't be finishing this particular offering in a hurry. What's more, there's even a level designer so you and your mates can design fiendishly difficult screens for one another, should you feel the need.

The graphics, while quite simplistic, are large and colourful, and although the sound effects are non-existent, I suppose we're at least spared any irritating warbling music. In saying that, it's the gameplay which counts and *Boulderdash* has spawned so many imitators precisely because it had bags of it. *Plasma Bubble* may not be cutting edge, but it's certainly challenging and engaging.

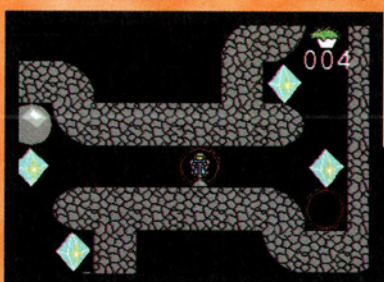


A map is available if you become bogged down with the enormity of the levels.

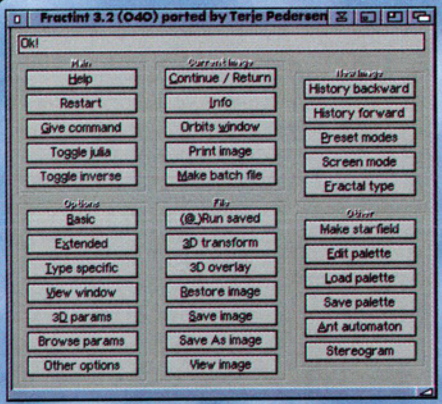




Collect the crystals and watch out for the tumbling eggs in this space age *Boulderdash* clone.



BY: Pontus Lundwall and Willis Lauskis
WARE: Francis Irving
PD LIBRARY: Classic Amiga Software
NUMBER OF DISKS: One
PRICE: £1 + 75p P&P



The range of menu bars available to construct a fractal pattern in this generator.

Selection of the month

FRACTINT v3.2

Fractals are groovy things. In fact, if I was Prime Minister, I would attempt to get Parliament to introduce a national fractal day, a bank holiday on which everyone would be encouraged to wear wacky fractal T-shirts. I reckon it'd be a widely supported policy. After all, just think back a few years, when for a brief while the world and his uncle seemed to be walking around in t-shirts featuring Mandlebrot sets. Geometrical analysis has never been so populist, or something.

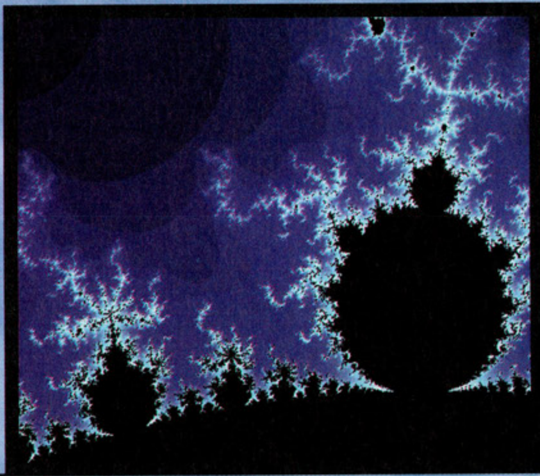
Benoit Mandlebrot, who nowadays most people have probably heard of, was the chap responsible for really drawing together and advancing fractal modelling. He joined IBM in 1958 and his work involved the increasing use of computers to produce visual representations of what we now call fractal geometry. It is his classic Mandlebrot set which generally springs to mind when we talk about fractals, but to this a great many other fractal images have been added over the years (I have always been more of a Julia Set man myself...).

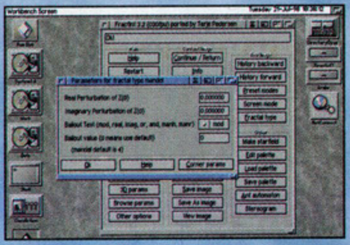
Fractint is a port of a PC program which is probably the most sophisticated and versatile piece of fractal exploration software in existence. It offers over 100 different types of fractal, all of which are explained in considerable detail in the accompanying documentation, much of which makes fascinating reading, providing your mathematical knowledge stretches to complex and imaginary numbers.

You'll need four disks to get *Fractint* up and running properly. First you have to copy the contents of a disk containing the main support files onto your hard drive. Then you'll need to copy the *Fractint* executable. Here you have a considerable choice as there are no fewer than six available, for machines using a plain vanilla '020, with or without an FPU, right up to those containing '060 CPUs. Make sure that you state which one you need when you are ordering *Fractint*. You will also want the two *Fractint* extras disks, which contain archives you must join, with the supplied *JoinSpliter* program, and then extract.

Once you have done all this messing around, you're in business. Generating a fractal image can be as straightforward as picking a type from a listview and zooming in on a part of it that interests you, or as complex as specifying particular parameters with which the equations should operate. The resultant images can be saved as GIF files so you can print them out or play around with them in your favourite art package.

There are faster fractal generation programs around, but undoubtedly there are few that come anywhere close to *Fractint* in terms of features and flexibility. Whether your interest in fractals stems from a fascination with complex mathematics or from a soft spot for colourful, pretty patterns, you will absolutely love playing about with this.





You can set specific parameters (above) in order to generate stunning fractals like the one on the left.

BY: Terje Pedersen
WARE: Free
PD LIBRARY: OnLine PD
NUMBER OF DISKS: Four
PRICE: £3.00 + 75p P&P

be absolutely no use whatsoever to you. You are certainly not going to be able to produce a Brian Wilson-esque masterpiece with it; indeed, you'd be lucky to out-compose Brian Harvey.

However, if all you're after is a straightforward program that lets you play around with a few sound samples, *Beat Box* is certainly up to the task and will prove well worth the five pounds registration fee.

Music Bugs

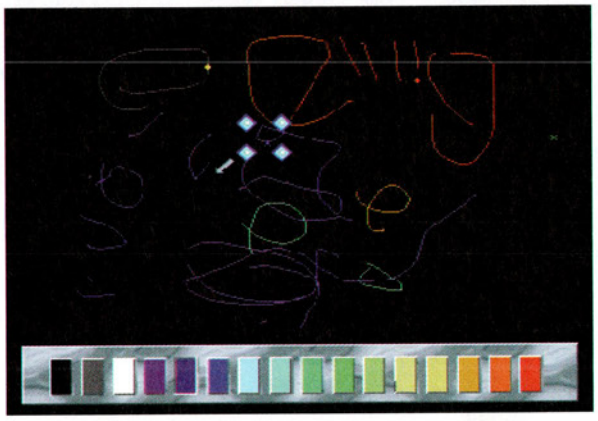
BY: Jigsaw Design
WARE: Free
PD LIBRARY: Roberta Smith DTP
NUMBER OF DISKS: One
PRICE: 90p + 50p P&P

Every once in a while the PD Select mailbag will contain something a little bit different, something other than the latest clone of an early eighties arcade smash, or yet another crappy *AMOS* drawing program. *Music Bugs* is one such diamond. It represents that most rare of things – a new idea for a piece of software.



Draw some lines and then watch and listen as the bugs randomly make their sweet music.

The concept is wonderfully uncomplicated. Your Amiga sends several bug things across the screen and when they walk over a colour they play a note, with a pitch that depends on the particular colour. You can doodle on the screen using a variety of colours, with a couple of them (such as white and grey) being reserved as command colours. If the bugs run into these, they will change direction. The idea is that you just play around and see what sort of beats and effects you can create.



The program comes with a set of samples assigned to particular bugs, but you can reassign samples or use your own should you so desire – chip memory permitting, you can have up to twenty available.

Music Bugs is one of those brilliant, pointless programs you can spend ages fiddling around with. It's the sort of application for which computers were really invented. Don't let anyone tell you it's a waste of time – let's face it, it's more creative than playing *Quake* and a whole lot more enjoyable to use than an accounts package or a word processor...

This is an Amiga Club International disk, available from ACI c/o Roberta Smith DTP. If you've got an AGA machine, order it right now.

Continued overleaf ➡

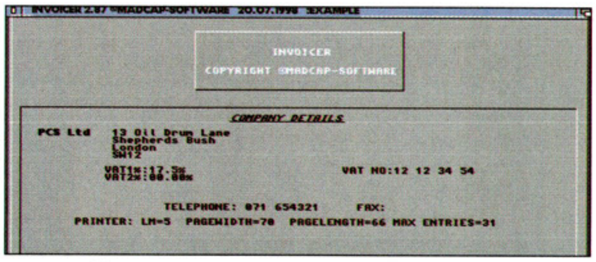
Invoicer v2.87

BY: Peter Hughes
WARE: Share
PD LIBRARY: OnLine PD
NUMBER OF DISKS: One
PRICE: 75p + 75p P&P

A mate of mine works for a graphic design company and he always seems to be absolutely snowed under with work. Having already done a full week, he ends up going into the office most Saturdays and Sundays so he can stay on top of all the paperwork. It's now so bad that when several of us took a short break recently, he actually ended up bringing a pile of paperwork with him so he wouldn't get too far behind.

I think I'll lend him my spare old A1200 and my copy of *Invoicer* because it could save him an awful lot of time spent issuing and following up invoices.

As the tutorial section of the documentation illustrates very effectively, this is an extremely easy program to get to grips with. First of all you will need to input a few company details (which will obviously be printed at the top of all your invoices). Then you create an item for which the invoice is to be issued, inputting a code, price and description. Then you key in the customer details, hit the save button and print yourself off as many copies as are required. And that's all there is to it.



Keep your finances in order with this invoicing package.

There are a whole load of useful features, such as a Review function which comes fairly close to providing a batch invoicing option, a customisable label print-out function, an end-of-the-month print-out and clear-out function, the option of producing a summary of invoices issued on a certain date or between two specified dates, and a lot more besides.

Invoicer is the sort of program on which the entire Shareware scene is founded. It is a piece of software written by an enterprising programmer in order to fulfil a very specific role and it does its job admirably.

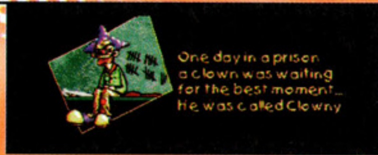
It's not bristling with flashy features that you will never want or even need to use, but it is more than capable of alleviating a great number of everyday invoicing headaches. What's more, if you like it then it's yours for a measly ten pounds.

Darts 501

BY: Eric Park
WARE: Free
PD LIBRARY: F1 Software
NUMBER OF DISKS: One
PRICE: 80p + 75p P&P

This has been quite a month for talking games. Although *Darts 501* can't offer quite the same

CROSS COUNTRY



The enigmatic Clowny, waiting in prison for the best moment...







Although I shouldn't mock the author's English as it's infinitely better than my French, the *Cross Country* introductory screens are wonderful: "One day in prison a clown was waiting for his best moment... He was called Clowny. Clowny was ugly and swore to run away. It didn't take long, he escaped from his jail. He did the worst things. He kidnapped the princess, cut the tail of a fox, he had a bomb built in his circus-lab. Fortunately he forgot a detail; the fox whose tail he cut will he be able to save the world?" And all this to some offbeat chase-style music. Superb.

***Cross Country* is a "jump jump" game. As the heroic fox, you must leap over obstacles as a rural landscape scrolls quickly past and that's about all there is to it. What we're talking about here is a simple five-level arcade action game. However, you'll need extremely good reactions, a decent knowledge of the levels and a fair amount of luck to reach the finish as foxy travels so fast you won't necessarily see an obstacle coming until you are practically on top of it.**

***Cross Country* is beautifully presented. The graphics are extremely attractive throughout, the game scrolls smoothly and swiftly, the music's all pretty good and the sound effects are excellent. The fact that *Cross Country* is pretty challenging too (despite numerous attempts, I couldn't get past the second level) will only add to its appeal for action game fans. This is the sort of polished arcade romp at which the Amiga has always excelled, and for all its apparent simplicity this is quite an enjoyable offering.**







Leave your wrist joints shattered in this frenetic platform game, similar to the riding sections of *Crash Bandicoot 2*.

BY: Daniel Labriet
WARE: Gift
PD LIBRARY: Classic Amiga Software
NUMBER OF DISKS: Two
PRICE: £2 + 75p P&P

MUMMY'S PLAYTIME



Let's all say a hearty "Hurrah!" for *Mummy's Playtime*, which is without doubt the noisiest kiddies program ever to have graced the pages of PD Select. *Mummy's Playtime* (or *Mummies Playtime*, as it calls itself periodically, despite its grammatical incorrectness) comes on four disks which need unpacking to your hard drive, and the reason is that the various games which make up the package are absolutely jam-packed with sampled sound effects.

After a cute little voice reads out the credits, you're presented with Mummy's menu. Mummy, for all her friendliness, isn't what you'd call a looker. Indeed, she seems to have a bizarre skin complaint, her face featuring more lines than *Hamlet*, many of them greyish in hue. On offer: Go Troll, Bangman, Choo Choo Shoe Shoot and Chase The Troll. (Note, if you will, the slight troll fixation.)

Select Go Troll and Mummy's subtle Yorkshire accent suddenly veers several hundred miles south, proclaiming, "That's-a good-a game," in a bizarre mock Italian voice.

Go Troll appears to be a strange, card-based game. Mummy sits there behind the card table and periodically prompts you with phrases like "Come on, I'm tired", "Mummy thinks you're clever", and "Ooh, you're so good", the latter sounding just like it's been lifted from a tacky late-night Channel 5 soft porn film.

That I couldn't work out what on earth was going on in Go Troll was of minor importance; hearing Mummy suggest that I "Grab a troll, sweetie lips" and then proclaim that "I got what I wanted" was just too darned entertaining for me to care.

Bangman ("Great, I'm-a like-a Bang-a Man-a!") is essentially the traditional Hangman game, except that here when you get a letter wrong, some poor businessman gets "Dynamite in the pockety-poos".

Choo Choo Shoe Shoot involves shooting at some shoes when they appear at the windows of a train carriage (don't ask me, I just tell it like it is...), while in Chase The Troll you have to guess which cards, face down on Mummy's card table, feature pictures of particular trolls. For this last game, Mummy's had her face ironed and she's gone all hip, proclaiming that "Yeah, we're rockin'" with alarming regularity.





Business man meets his maker after one of mummy's trolls blows him up.







While I'd have to question the educational value of any of these games, bar perhaps Bangman, they nevertheless provided amusement for everyone I showed *Mummy's Playtime* to, and I'm sure they would keep kiddies occupied for some time. In the words of Mummy, "Rock and roll, mate."

If your kids need a synthesised northern mum with a soft spot for trolls then this is the game for you.

BY: Silly Software
WARE: Free
PD LIBRARY: F1 Software
NUMBER OF DISKS: Four
PRICE: £3.20 + 75p P&P

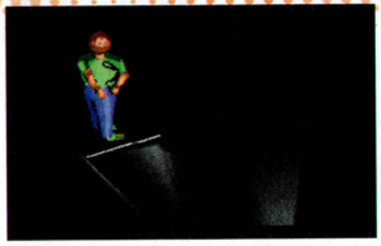
level of silliness as *Mummy's Playtime*, it's an altogether better game and it does use speech samples to good effect.

"How can you computerise darts?" I hear you ask. Well, the idea is that you use the mouse to aim roughly where you want to throw your darts, with the computer randomly wobbling your sight around a bit. This works surprisingly well.

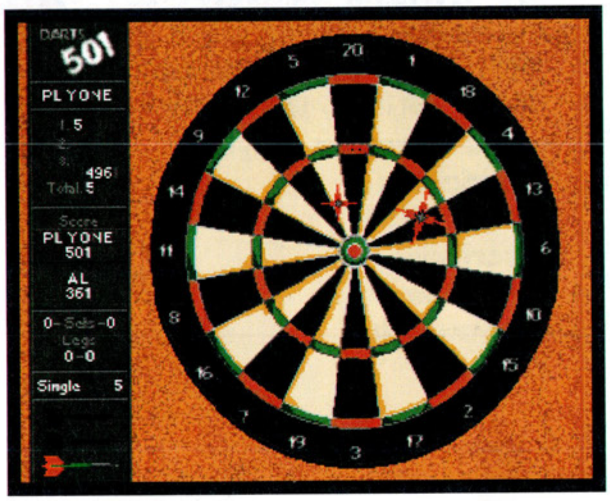
While computerised darts isn't quite the same as throwing a few arrers at the oche in the local after consuming a skinful of your favourite poison, it's still a decent game in its own right.

You can play 501, 301 or Round the Clock, or simply practise if you so desire. Games can be against a friend or the Amiga, which is represented on screen by a strange, rendered bloke wearing a natty, bright top with trousers and glasses.

There are three difficulty settings – on the middle setting I beat the Amiga in my first game, only to be completely annihilated in the next match. There's also a season mode in which you play against a series of 11 computerised opponents. The music's atrocious, but otherwise Darts 501 is a well presented and thoroughly enjoyable game, and the digitised score-calling is a nice touch. Get the beers in lads, it's a bit of a laugh, this is.



All the thrills of your local boozer, minus the beer, smoke and occasional punch ups at closing time.



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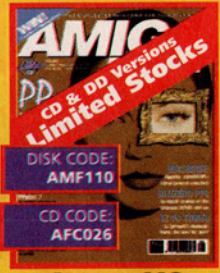
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SERIOUSLY AMIGA

In-depth reviews of hardware and software that you can trust.

Can you tell why I'm grinning yet? This page is always one of the last to get done in the magazine, after we've already given our findings on all the items you see to my right, but there are some that aren't in here this month. The reason I'm grinning is because I know what you've got to look forward to next month – we've finally received a CyberStorm III for review, we're hoping to get the Paloma TV module for the PicassoIV and there should be a pair of PPC graphics cards heading our way too. It's also on the cards that we'll have a new version of AFS, back from the dead, and Power's astonishing *PowerMovie* software for FMV. See you next ish!

Ben Vost



AMIGA FORMAT'S REVIEW POLICY

...is very simple. ***Amiga Format*** is staffed by some of the most experienced Amiga users in the world and what we say goes. OK?

WHAT OUR REVIEW SCORES MEAN

Score	Meaning
90+%	The crème de la crème. Only the very best, most versatile and effective products are awarded an ***AF Gold*** – the most highly prized rating there is.
80-89%	These products are very good, but there are minor flaws or areas that could be improved upon.
70-79%	Not a bad product but quite possibly one that needs a serious update.
60-69%	Average products with somewhat limited features and appeal. Products in this category tend to be flawed.
50-59%	Below average products which are unlikely to impress your mates or your wallet. Avoid.
40-49%	Overwhelmingly poor quality products with major flaws.
Under 40%	The absolute pits.

Flash Buddha

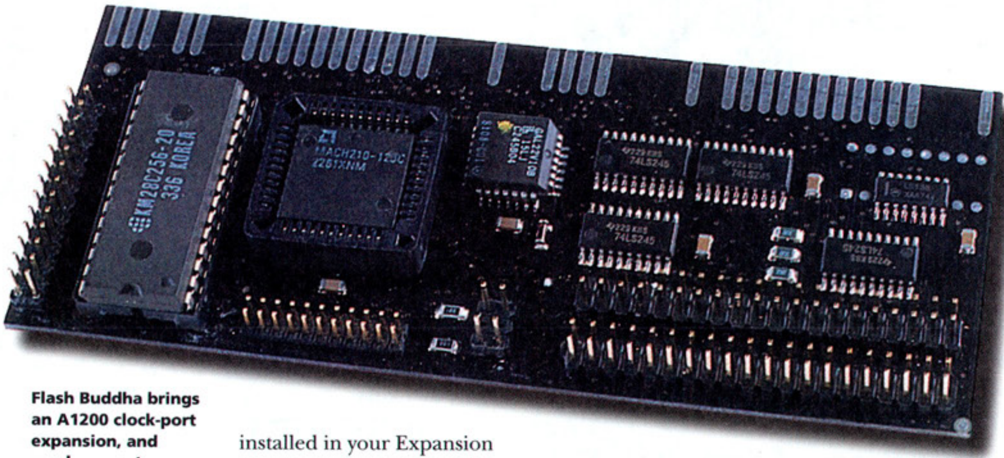
Simon Goodwin tests the revamped Flash Buddha Zorro expansion.

AMIGA GOLD FORMAT

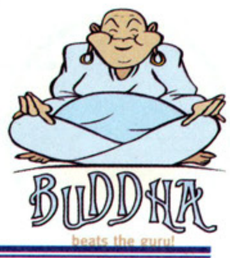
Flash Buddha is the new version of Jens Schoenfeld's multi-purpose Zorro expansion card, tastefully redesigned on a small black circuit board and slimmed down, yet with even more expansion potential. The original was named for its six 'arms' – potential connections to IDE master and slave drives – after the Buddhist goddess Shiva. The new version could make even an octopus jealous as its array of ports rivals baby hedgehogs for prickles.

Measuring just 129 by 55mm, Flash Buddha majors on connectors. The 100-way Zorro card edge has unused connections missed out, PC-style, to reduce costs, and the remainder are tinned but not gold-plated. Half a dozen surface-mounted logic chips contribute to the interfacing, along with a few tiny decoupling components, flush with the board.

The two biggest components are the socketed MACH210 gate array, which is common in semi-custom Amiga expanders, and a 28-pin permanent memory, the only old-style DIP chip on the board. This replaces the conventional boot EPROM with 32K bytes of electrically re-programmable 20 nS memory.



Flash Buddha brings an A1200 clock-port expansion, and much more, to Zorro systems.



> Less than half the space is used at present, leaving 18K for future enhancements like code to boost startup speed...

FLASH BIT

The 'Flash ROM' on the board permits autobooting from any IDE hard drive in standard format. It worked at once with the IDE drive from my A4000, and on the A3000 too. It does not yet boot from CD but this is planned. The 'flash' feature means it can be upgraded in place, from a floppy, with no need to juggle chips or even open the box.

Less than half the space is used at present, leaving 18K for future enhancements like code to boost startup speed and a double-scan monitor driver so BootMenu will work on non-TV rate displays. This will be great when it works, but if the update crashes you could lose the autoboot facility, reverting to the old boot software installed in your Expansion drawer. Such disasters should be rare and the chip is socketed so it can be changed without having to return the whole board.

PRICKLES

Flash Buddha communicates through six gold-plated pin-fields, numbering two to 40 pins per set. It has two buffered IDE ports for cheap hard drives, ATAPI CDs, IDE Zips or LS120 removables. If two master and two slave drives won't suffice, each port is also compatible with IDE splitters which double capacity, allowing up to a maximum of eight drives.

One 80cm cable is provided for the first pair of drives. Additional 40-way cables are available from Power Computing and generic PC shops. Buddha's ports are fully buffered, unlike the A1200's internal IDE, but you should still keep the total length of cables you connect as short as possible – unlike SCSI, IDE specifications are only intended for internal drives. They lack termination, reflection and radiation control for fast, reliable communication on longer cables. Elaborate Bytes recommend no more than 1.8m (70") of cable in total.

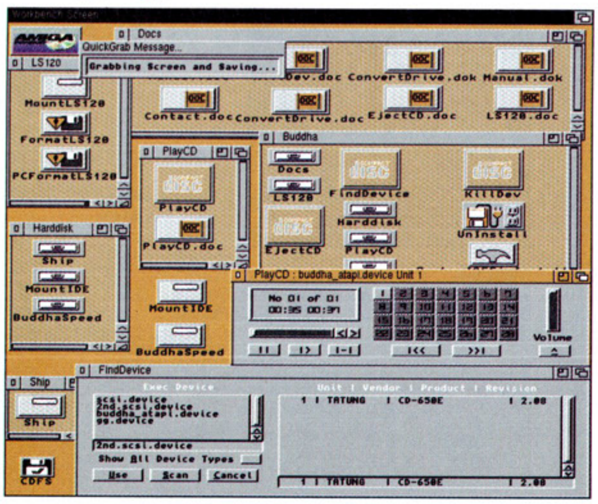
This is just enough to allow full use of a big tower case or an external drive in an adjacent box. Users of IDE CD-ROM writers should dedicate one IDE port to that drive, permitting hard disk access through the other port without interference to time-critical CD writing.

Two LED port activity connectors are a welcome bonus. The top one indicates activity on drives 0 or 1 (master and slave respectively), and 2 or 3 if an A4000-style IDE-splitter is fitted there. The second connector monitors activity on drives 4 to 7.

LEDs and wires are not provided but they're readily available from electronics suppliers. Alternatively, you can usurp the Drive, Turbo or Power lights of a tower case. LEDs only work one way round, so if they don't shine first time, flip the connector over.

There's no option to pass through existing hard drive signals so that all drives use the same indicator, though this could be improvised by linking ports with diodes.

Like other Elaborate Bytes products, Flash Buddha has a custom expansion port at the edge, suitable for Catweasel 2, MPEG audio and future products. However, the neatest innovation on Flash Buddha is the A1200-compatible 'clock port', a fine-pitched 22-way connector above the square socketed gate array (see box).



Buddha's bounty – loads of bundled IDE software.

MECHANICS

Flash Buddha works anywhere in a Zorro backplane but is best installed in the last Zorro slot, giving easy access for cables. Each time I fitted it I had to power down, adjust its position and reboot a couple of times before ShowConfig recognised it, but thereafter it worked consistently.

Buddha's too small to use the ends of the slot for connections or mechanical support, but it doesn't obscure much beyond it and you may be able to squeeze a half-size ISA card or video slot adaptor into the adjoining socket of the same slot.

The installation instructions are cursory, mainly warnings about getting the connectors the right way round. A diagram would also have helped.

The main documentation consists of 35 single-sided A4 pages of typeset text, in English and German. Much of it is reminiscent of Oliver Kastl's *IDEfix* and it's all the better for that. It clearly explains the full ATAPI, CacheCDFS and CD^{32} emulator (for AGA only) software bundle.

There's no index, but the copy on disk can be searched conveniently. The detailed information about CDs is excellent, but several small Buddha extras are only mentioned in screens displayed during installation. However, an update is scheduled.

SOFTWARE FEATURES

Without software, interfaces are just expensive heaters. Flash Buddha comes with an 880K floppy holding the best software support of any board I've reviewed. Unix drivers are not included but they are freely available.

The installation script copies files, builds a mountlist, finds your CD drive and mounts it, all within three minutes of selecting 'Novice User'. You get everything you need, apart from Commodore's *HDToolbox* and bonuses like BuddhaSpeed and Park commands, PlayCD and LS120 tools.

Drives are partitioned with *HDToolbox* and formatted in the usual way. #ConvertDrive# rotates words from Intel to Motorola order, fixing data recorded by GVP or Apollo controllers.

Drives formatted with a Commodore interface work without change. Like Commodore's IDE hardware, Buddha masquerades as 'scsi.device' unless a real scsi.device or another surrogate is found. It will then promote itself to 2nd.scsi.device or higher. Either way, *HDToolbox* spots Buddha drives automatically.

RAWSPEED

Buddha consumes a bit more CPU power and is slightly slower than Commodore's internal IDE port which bypasses Zorro, but Zorro 3 DMA would be a bit much to demand at under fifty quid. The performance falls short of Power's Flyer and true DMA systems as Buddha, like most IDE interfaces, relies on the CPU to carry data to and from each drive. It still had no trouble keeping up with my 6x CD drive, and it delivered reasonable, if not sparkling, performance on my 'MultiMedia Ready' Seagate Medalist hard disk.

The BuddhaSpeed command offers eight IDE data transfer rates. This leaves more time for the Amiga's main processor (as the table shows) if your drives support faster handshaking, but the Zorro 2 implementation remains a bottleneck. Elaborate Bytes reckon Buddha can manage 2.5Mb per second with a fast drive on a 68030, close to Zorro 2's theoretical limit of 3.58 Mb/second. While it did not manage half that in my tests (on a 50MHz A4000/'060 and a 25MHz A3000/'030) it delivered sufficiently consistent results to indicate that the CPU was not the limiting factor, though it would be in an unaccelerated A2000 or adapted A500 slot – yes, it works there too!

RawSpeed performs 512K sequential reads, number-crunching in the background to gauge processor time left over. Real performance depends on the entire system, but Buddha offers great flexibility at a fairly typical speed for a polled IDE interface.

Price, software and added value set Flash Buddha apart. Schoenfeld and Kastl have done the near-impossible: they've made IDE cool and turned an existentialist into a believer.

THE CLOCK PORT – AN A1200 AFTERTHOUGHT

Buddha's 'clock' port is compatible with the header nestling between the memory and the Kickstart chips in an A1200. Commodore never seemed to really know what to do with this header. It originally had twice as many pins to allow plug-in expansion of a cut down A1200 from 1 to 2Mb.

When they decided to fit the A1200 with 2Mb of chip RAM as standard, the redundant pins were pared away. This left just enough signals, or so they thought, for an OKI or Ricoh real-time clock chip and battery, to store the time and date while the computer was turned off.

If this port was only suitable for a clock it would be insignificant, especially as most trapdoor expanders for A1200s include the clock and battery. However, efforts to squeeze extra functionality out of the A1200 design have extended the potential of the 'clock port' beyond Commodore's intentions, to the point where it's a useful extra for other Amigas, including the Zorro equipped A2000, A3000 and A4000. Now they can connect cheap A1200 expansion hardware without clogging up another precious Zorro slot.

Drivers needs tweaking to address this port as it must not clash with the motherboard equivalent; you may be fitting Flash Buddha into a real A1200 with Zorro expansion. HyperCom and Catweasel 2 have already been modified and Red Skull's serial accelerator should also work. Jens expects a patch for the Melody drivers soon, and the forthcoming low-cost A1200 internal version of Prelude should also be compatible.

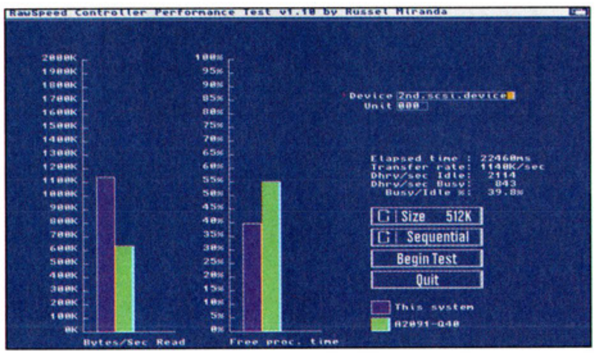


Last minute updates from Buddha's installer.

Buddha Speed Tests

Cyberstorm 2 '060/50	Seagate ST51080A	Tatung ATAPI 6x CD
BUDDHA, DEFAULT SETTING		
A3000, Kickstart 2.04	1141K/sec, 3.2%	823K/sec, 21.0%
A4000/'060, Kickstart 3.0	1140K/sec, 2.3%	823K/Sec, 26.8%
'060+RAM, Kickstart 3.1	1141K/sec, 2.5%	813K/Sec, 20.1%
BUDDHASPEED 7 (MAXIMUM)		
A3000, Kickstart 2.04	1182K/sec, 43.5%	823K/Sec, 51.6%
A4000, Kickstart 3.0	1166K/sec, 31.9%	823K/Sec, 49.0%
'060+RAM, Kickstart 3.1	1189K/sec, 41.7%	818K/Sec, 57.9%
COMMODORE A4000 INTERNAL IDE PORT		
A4000, Kickstart 3.0	1565 K/sec, 42.8%	823K/sec, 64.8%
Softbooted, Kickstart 3.1	1553K/sec, 43.7%	823K/sec, 64.5%

***RawSpeed* tests show Kb per second and percentage CPU time remaining.**



Buddha outruns an A2091 but consumes more CPU time.

SUPPLIER: Power Computing (01234) 851500
PRICE: £49
REQUIREMENTS: One free Zorro slot, Kickstart 2.04 or later.

Pros and Cons

- \+ The best software support package I've ever seen.
- \+ Works reliably at typical polled IDE rates.
- \+ Small and neat hardware design.
- − Very good documentation on CD support but scant on fitting.

OVERALL VERDICT:
A gold medal gadget with loads of potential.

90%

CD-ROM Round-up

Sights and sounds abound on these new CDs, so Nick Veitch gets his eyes and ears around retro arcade music and the latest 3D artwork.

Light Rom 6

AMIGA GOLD FORMAT

As usual, it's a pleasure to receive the latest *Light ROM* CD because it's always chock-full of the highest quality 3D artwork and models for *Lightwave* you can possibly imagine.

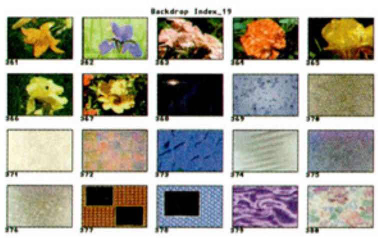
Most of the work submitted is by professionals who are showcasing their talent, but thankfully they provide complete scenes, not just final renders, so you can see for yourself how their various images were created.

This is the best form of tutorial for people who know a little about what they are doing because you can analyse how particular effects were created and adapt them to your own work. Of course, there are plenty of free to use models as well, which could come in handy for complicated scenes that have to be created in a hurry, or just to see how other people have tackled the problems involved in creating particular types of model. However, all this only takes up one disk, and the *Light ROM* set includes four!



One of the very impressive animated dinosaur scenes.





From backdrops (below left) to 3D models (above) the *Light Rom* CD set has something for everyone.

The second disk is devoted entirely to Dean Scott's Atom Bomb *Lightwave* scene. There is a large AVI of the whole scene, some demos and other scenes, as well as all the objects and textures used. It is a phenomenally detailed anim, and well worth the asking price of the set to see.

There are also several very realistic dinosaur scenes here, again with AVI files for you to see them in action (you'll need to get hold of *CyberAVI* or *AVId*). Disk three is full of tileable textures, most of which can be used in your own work with impunity. It also contains a demo of a project made by combining *Lightwave* and *World Construction Set* footage. Unfortunately, Questar, the producers of *WCS*, haven't yet released version 2 on the Amiga (although it is still promised), but the technique remains the same for earlier versions, and is quite illuminating.

The final disk in the set is the *Desktop Video* CD, which contains loads of backdrops. These are quite handy if you are too lazy to make them yourself. As ever, the disk isn't presented very well, but the quality of the content more than makes up for that

DISTRIBUTOR: Weird Science (0116) 2463800
PRICE: £29.99

OVERALL VERDICT:
Once again, an invaluable CD for serious raytracers.

95%

Digital Grooves

Are you the sort of person who hums the tunes from games over and over, driving your friends and colleagues totally nuts? If you can't get enough of the cheerful little ditties which accompany your favourite games, you must make a point of buying the *Digital Grooves* album.

Digital Grooves is an audio CD composed by Audio Works, a group which specialises in writing games music for all the top consoles and PCs. However, *Digital Grooves* is different, as all twenty tracks have been entirely composed and performed using little more than an Amiga A500.

To keep the low-budget, good-old-days feeling, even the sampling hardware has been home-built and the entire project sequenced using *OctaMED 3*.

> **The quality is distinctly 8-bit, apparently done on purpose to maintain the authentic in-game feel.**



Stick it on your hi-fi and relive your wasted youth spent playing *Robocod*.

The tunes vary in style but are unmistakably game-y in nature. I did detect several influences in them, including a little *Tubular Bells* in at least one of the tracks. For your money, you get over seventy minutes of almost-but-not-quite-familiar tunes, any one of which could potentially etch themselves into your brain if you're not careful, re-emerging as you hum to yourself on the bus. Don't expect the latest in hi-fi and you won't be disappointed. The quality is distinctly 8-bit, apparently done on purpose to maintain the authentic in-game feel.

Music on the Amiga seems to be undergoing something of a renaissance, what with the continuing development of MIDI sequencing tools and soundcards, not to mention the *Amiga Theme* CD (*AF114*). It's good to see Amiga musical talent like this striving to get heard, so congratulations to Audio Works, and here's looking forward to future releases.

DISTRIBUTOR: Audio Works, PO Box 3567, Milton Keynes, MK2 2ZN.
Email: Audio3567@aol.com.
PRICE: £9.99 (inc p&p).

OVERALL VERDICT:
Authentic in-game tunes.

80%



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World News

Usenet has never been as well addressed by Amiga software as other areas of the net, but can **World News** help? Ben Vost finds out.

AFCD31:-In_the_Mag-/Toysoft

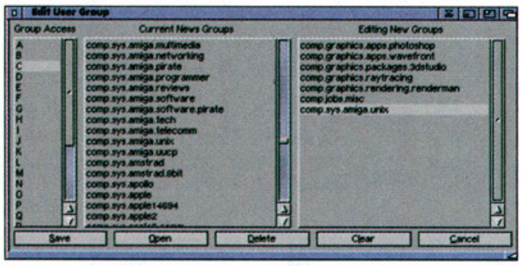
ON THIS MONTH'S CD

The statement that there are no Amiga news readers is, of course, false, but it's certainly true that this area of the Internet has received less attention than email, IRC or the web. While there are a few news readers for the Amiga, there are also a lot of people who stick with *TIN*, despite its age, obvious Unix roots and its ugliness. The fact remains that it is still a very powerful news reader, as most Unix programs are.

> **The fact that it can share an address book with AirMail Pro is excellent if you are already using that emailer...**

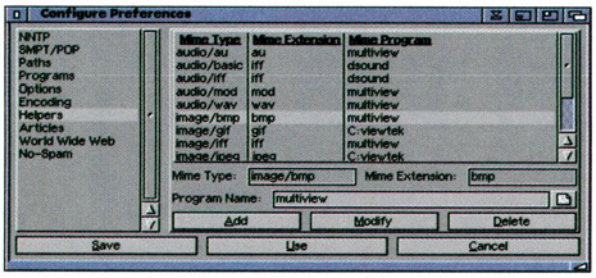
So, can *WorldNews* offer anything more usable than the hoary old *TIN*? The answer, very definitely, is yes... to a certain extent. If you're after a program with *MUI*'s looks, then *WorldNews* is the one for you. If, however, you want an offline newsreader, *WorldNews* might not be your first choice. Unfortunately, it has been programmed for the United States where people enjoy much lower local call costs and so don't mind being online for extended periods, unlike in the UK where every moment costs.

There is a batch downloader, but it isn't very easy to understand the way it's been done. In fact, there are quite a few things about *WorldNews* that ought to be changed in order to bring it in line with other modern net tools.



This bit would be much better if you could search through the list. As it is, you have to scroll through the whole thing and you also have to know how to use drag 'n drop to copy entries.

The first is the non-standard, *MUI*-based installer that Toysoft use. It doesn't add anything over the standard Commodore Installer program and causes suspicion because you aren't certain of what it will do. However, there are other more serious things that will crop up all the time in use.

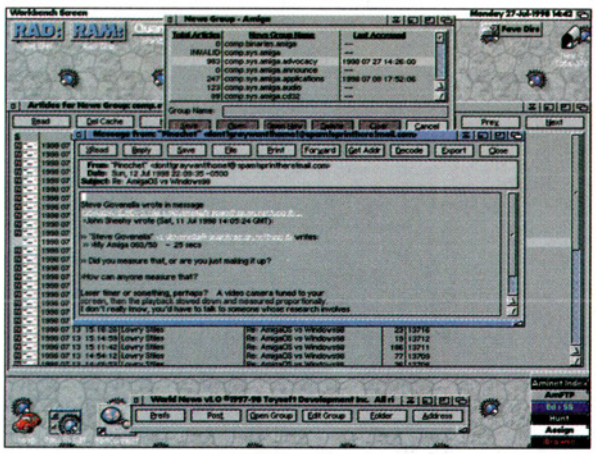


You can't just edit the entries. Oh no, you have to hit the modify button too!

For instance, websites can be clicked on to send your browser to them, but websites that don't start with "www." are ignored. Also, you can't edit your MIME entries in the way you'd expect – click on the entry, edit it, hit return. I did this for all the picture entries, which were defaulting to use Multiview and it was only when I got to the end that I realised I hadn't changed any of them. Instead, you have to also hit the "Modify" button. It's not a big deal now that I know, but it's a bit pointless and annoying.

It would also be nice if *WorldNews* took advantage of some of the more useful new *MUI* MCCs (*MUI* Custom Classes), like Gilles Masson's NList or Allan Odgaard's excellent text editor class. It doesn't even offer balancing bars where they're most needed.

It also leads you to believe that it is multithreaded so you can carry on doing other stuff while articles download. However, the pointer rarely changes to a busy one and you're still locked into doing what you're already doing. Finally, there's no threading, so it's hard to read through an argument.



WorldNews **in all its multi-windowed glory.**

There are points in *WorldNews*' favour, though. The fact that it can share an addressbook with *AirMail Pro* is excellent if you are already using that emailer, and even though *WorldNews* uses external programs to decode files, it does so in a transparent and user-friendly way.

Even so, it won't cope with multi-part usenet postings (you know, the kind that have (3/45) in the subject line) which *TIN* could do, and you'll still have to spend a good deal of time online selecting what you want to read before you can download it all.

Of course, this means that you won't need to read all the obvious spam, but it does mean you have to sift through the whole newsgroup first. It's up to you whether this is acceptable or not.

In conclusion, I would have to say that *WorldNews* is a good step in the right direction for an Amiga newsreader, but it really needs to be looked at in a critical way. There are other newsreaders out there, from *MicroDOT II* and *THOR* to *MNews*, and it would be good for Danny Wong and the other people at Toysoft to look at them before they continue work on *WorldNews*.

SUPPLIER: Toysoft (http://www.toysoft-dev.com)
MACHINE TESTED ON: A4000, A3000
PRICE: $35 US ($65 US with *AirMailPro*)
REQUIREMENTS: Hard drive, *MUI*, Internet connection

Pros and Cons

- \+ User-configurable interface, links with *AirMail Pro*.
- − Needs to be online for most operations.
- − Not good enough use of *MUI*.
- − Not threaded.

OVERALL VERDICT: Needs more work.

65%

AirMail Pro

Is there a need for a commercial email package on the Amiga? Ben Vost doesn't think so.

AFCD31:-In_the_Mag-/Toysoft

ON THIS MONTH'S CD

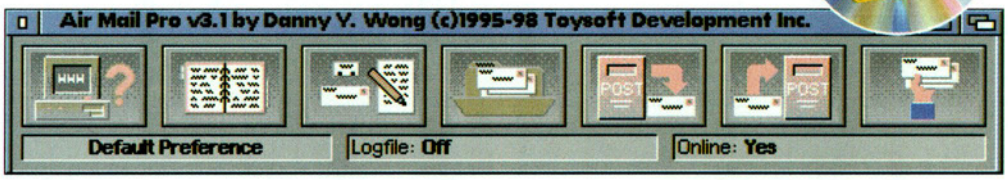
AirMail Pro could be so good. It has some lovely features: forms which can even have sounds, the ability to see what's on the server before you download it, mail and spam filtering, a very configurable *MUI* interface, multiple email boxes and more. Unfortunately, it's not quite there.

For a start, taking your inspiration from *Quickmail,* the mail package we used to use at Future on the Mac, isn't the best ideal as it's rather clumsy and slow. The Amiga makes it faster because the Amiga's interface is much more fluid than the Mac's, but all the same, *QuickMail* is not a good starting point for an Amiga email package.

> "... coming hot on the heels of YAM, which is FREE, it's difficult not to be hard on Toysoft's commercial program."

There are far nicer email packages, even on other platforms, but the Amiga has tools like *YAM, MicroDOT* and *THOR* already there, doing things better than most email systems.

Furthermore, there are just too many windows. Why do we need to have about six different windows for a simple email package? It's confusing for the beginner and unnecessary for the experienced user. The forms are also nice, but only of use to other *AirMail Pro* users, and the same goes for the graphical sigs. I'm sorry to sound so harsh this early in a review, but coming hot on the heels of *YAM,* which is FREE, it's difficult not to be hard on Toysoft's commercial program.



The big default buttons are ugly and not very informative as to their functions.

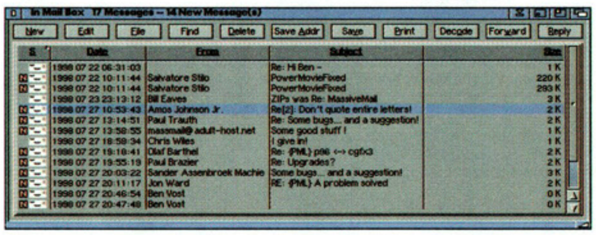
This harshness is also justified as there are other problems with the package, such as the lack of online help. You can download an HTML version from Toysoft's website, but it won't be context sensitive like the ageing, but standard, AmigaGuide.

INSTALLATION PROBLEMS

Talking of standard, the installer you use to get *AirMail Pro* onto your hard drive isn't exactly conventional. Just like *WorldNews, AMP* uses a *MUI* program to get the software onto your machine.

I have no objection to people using a different install method if it offers something more than the standard Installer program, such as better version checking, faster decompression, etc, but this one doesn't. It does say which versions of the *MUI* custom classes that *AMP* needs will be installed, but I still had to find out which versions I already had.

In use, *AMP* is alright, although both the large and small icons are confusing rather than clear, so I swiftly resorted to the text buttons. This required a restart of the software to work properly.



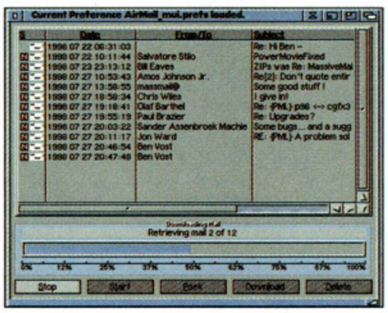
The main in-box window with text buttons this time. Unfortunately, although it's very easy to drag and drop emails, it has no purpose.

Although you can have up to ten different .sig files, there's not much explanation of how to go about creating them, and having random tags added is not much consolation as they can only be 80 characters.

The signature also doesn't change if you select one of the other sigs available, only seeming to add another sig to the bottom of your mail.

Also, the different columns in the InBox window use NListviews by Gilles Masson, but aren't saved when you snapshot or quit the program. This means you have to either reorder and resize each column every time you open the window, or just get used to the way Toysoft have set it up.

As I said right at the start, it's a shame, but *AirMail Pro* really hasn't convinced me that I should go out and spend money on a commercial email package when there are offerings that are either free or Shareware that are so much better.



The 'Super MailBox' is used to download mail from your server.

PROBLEMS

- No online help.
- Can't import or export email or address books from other mail packages.
- Ambiguous requestors.
- Can't forward to people not in address book.
- Not much ARrexx – *YAM* has 54 commands (not all implemented), compared to *AMP*'s 17.
- Ugly and difficult to understand interface buttons.
- Uses external programs for MIME encoding and decoding.
- Doesn't automatically sense MIME type for attachments.

SUPPLIER: Toysoft (http://www.toysoft-dev.com)
MACHINE TESTED ON: A3000, A4000
PRICE: $40 US ($65 US with *WorldNews*)
REQUIREMENTS: *MUI*, Internet connection

Pros and Cons

- \+ Forms are very nice when traded between *AMP* users.
- \+ Spam filtering on the server.
- − Overly complex *MUI* interface.
- − No migration features.

OVERALL VERDICT:
Not improved enough from the version we reviewed previously.

65%

MakeCD 3.2

AMIGA GOLD FORMAT

It's software to make CDs, it's reached version 3.2 and it's really impressed **Nick Veitch**.

There are some areas of Amiga software which seem rather under-subscribed. How many top class spreadsheets can you think of? What about CAD software, or even desktop processing programs?

> *Probably the greatest changes to MakeCD, in terms of the way the software is used, are with the user interface…*

However, in the seemingly small area of CD-ROM writing software, there are three professional quality products. I prefer to use the excellent *MasterISO2*, there's the as yet unseen by us *BurnIt!* and, of course, *MakeCD*. There is a wealth of good software that you, the consumers, are benefiting from.

The presence of several products in such a competitive market means everyone is working hard to try to get ahead of the competition. No single package has emerged victorious yet…

CHANGES

Probably the greatest changes to *MakeCD*, in terms of the way the software is used, are with the user interface itself. In response to the pleas and suggestions of many of its users, it now features a novice mode. Although *MakeCD* always allowed a huge degree of control over the process of generating image files and burning CDs, it was still very daunting for the inexperienced user.

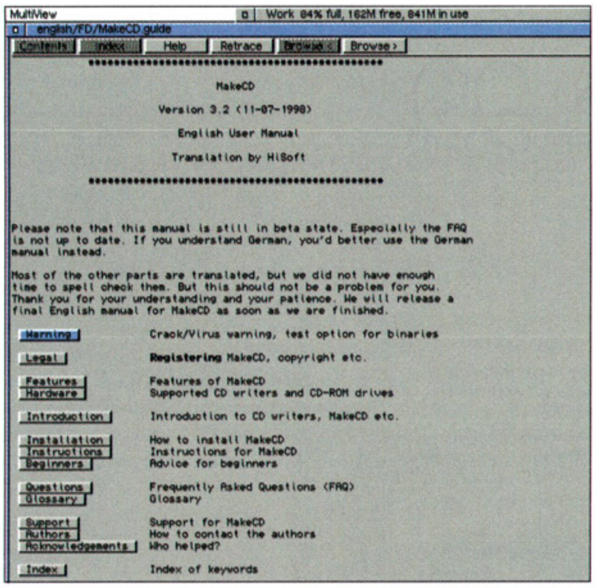
AFCD31:-Seriously_Amiga-/Commercial/MakeCD

ON THIS MONTH'S CD

ON THIS MONTH'S CD

The Shareware version of *MakeCD3.2* can be found on this month's CD. You can check through the compatibility documents and try the software for free!

You now get to choose whether you reckon you are an expert or a novice. Novices are shielded from potentially confusing settings boxes and defaults are assumed. The defaults will work perfectly well most of the time and many of the settings are only there either for completeness or for people cutting special CDs.



The online help is context sensitive and very thorough.

In novice mode, it is a simple matter of choosing the source of your CD, whether that be another CD, a pre-written image, a directory of an AmigaDOS device or even a Block device. Then you are ready to write.

All the buttons feature a bubble help system which explains what function the gadget the mouse is currently over performs. Thankfully you can turn this feature off – in my experience, the "bubbles" pop up far too quickly, obscuring the window when I'm in the middle of doing something.

EXPERTS

Those of you who consider yourselves experts will be pleased to know that you can still change just about everything to do with the way the CD is written. *MakeCD* has always offered unparalleled control over what is actually written to the CD and this hasn't changed.

If you really need to control things like catalogue numbers, pause blocks between tracks, audio track block lengths and so on, you still can, but even experts may benefit from running the software in the Novice mode when they don't need to do these things. The result of this is a much clearer and friendlier interface.

AUDIO

MakeCD has, without doubt, the most comprehensive tools for creating audio discs, either as strictly audio or as data with audio. In fact, this month's data and audio cover CD was mastered with *MakeCD3.2*. Some of the features, including direct support of MPEG-A, are so far unique to *MakeCD*.

Virtually all Amiga sound formats (except 8SVX) are supported, as well as popular formats like WAV and, obviously, CDDA. *MakeCD* now also supports AIFF-CD files and can exchange these directly with *Samplitude*. If you select mono files, they can automatically be converted to 16-bit stereo by the software.

If nothing else, the audio handling

ON THE FLY

***MakeCD* has included on the fly recording for some time, but this useful feature has been enhanced by the CD copying feature of the software.**

To record on the fly, the source has to be read, processed into an image stream in the buffer and then transferred onto the disc. The advantages of cutting disks in this way are immediately obvious: speed and space.

As the image is created at the same time as it is written to the CD, it saves a lot of time. It also means you don't need to have 650Mb of free disk space to store the image file before cutting.

This type of recording is more susceptible to write failures if your hardware isn't up to scratch. If you are running an unaccelerated machine you could run into problems, especially if your source is a drive connected to an interface that doesn't manage DMA transfers very well. The more CPU time taken up in actually transferring data around the bus, the less there is available to actually create the image.

If you are duplicating CDs, it is important that the device you are reading from is CDDA compatible. Some older SCSI and ATAPI devices aren't and these will be useless for transferring tracks from other CDs.

Having said all that, on the fly recording works very well, even on a moderately expanded Amiga. Although this feature did exist before, thanks to the new interface it is much easier for the novice to use.

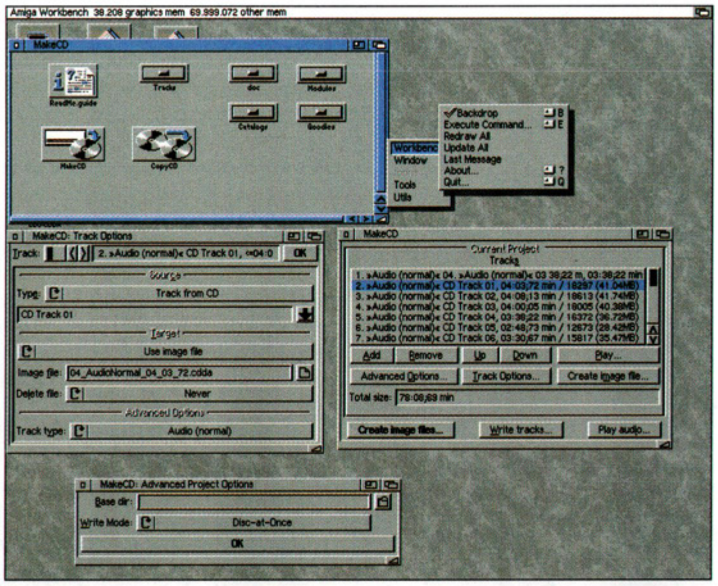
of *MakeCD* is a great place to play back your audio files, with all the usual controls. If you are creating a DAO volume, you can use the playback functions to place new index marks in tracks as you listen to them being played, and this is an amazingly useful feature.

RELIABILITY

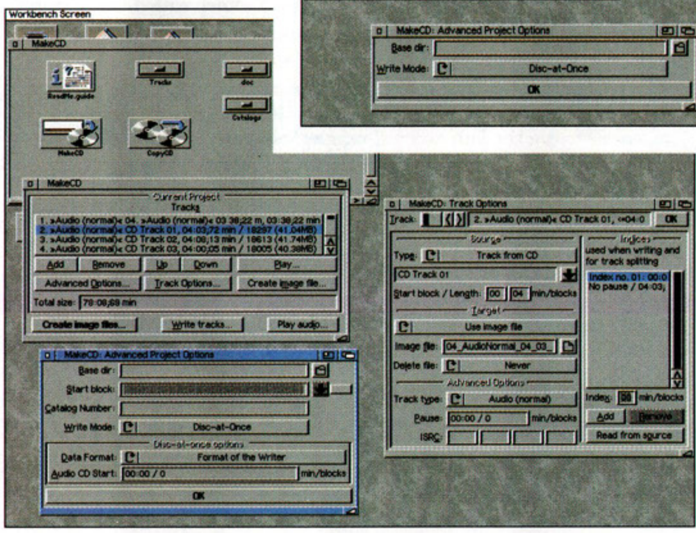
With *MakeCD* now at version 3.2, it is what one might describe as a mature product. This means that most bugs in the software have been dealt with by now, even those introduced with release 3.0. Of course, it is beyond the scope of this review to test every kind of operation on every kind of Amiga with every combination of CD writer.

It is impossible for the authors to do so personally as well, but the benefit of having a Shareware distribution is that there are effectively hundreds and thousands of beta testers.

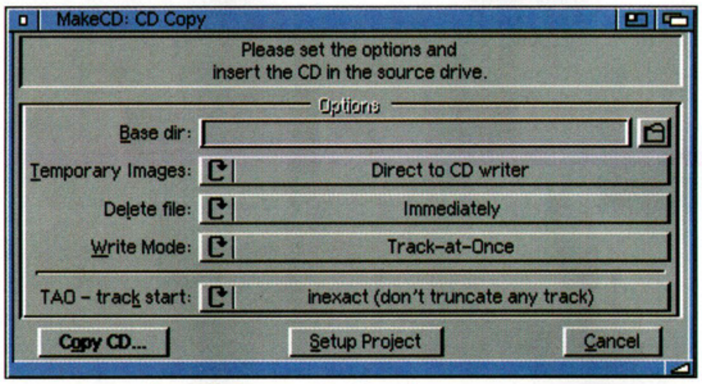
MakeCD is extremely well supported, with regard to both the on-line mailing list and the documentation which accompanies the software. The FAQ is extensive and even though *MasterISO*'s excellently detailed manual probably covers more, the *MakeCD* documentation is still more than adequate.



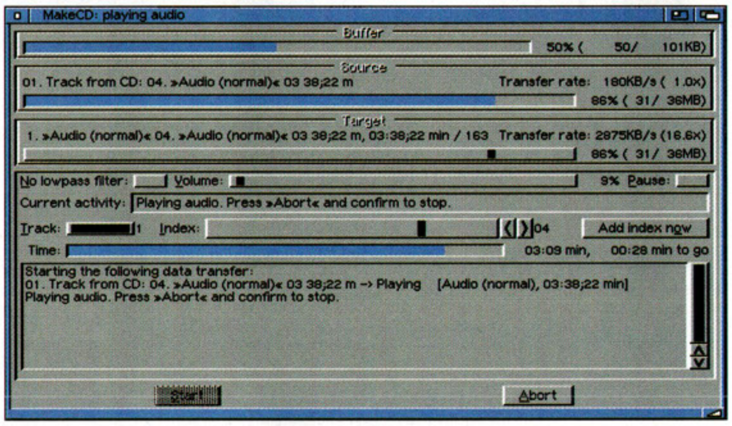
The difference between expert mode (right) and novice mode (below) is the disappearance of potentially confusing options.



Having three windows open at once can still be a little confusing (above).



CD copying couldn't really be any easier (above).



For DAO mode, new audio index points can be specified.

CONCLUSION

MakeCD has improved dramatically over the time it has been available. Commendably, the upgrades have been freely available for registered users too.

Over time, it has added support for various new drives (now including ATAPI CD-Rs), audio formats and writing formats. It is more rugged and reliable and performs a creditable job. I feel sure it will continue to improve.

SUPPORTED WRITERS

The list of writers supported by *MakeCD* has grown rather too large to fit into this review. It does support all the popular drives from major manufacturers, but it is wise to check that you have the most up to date Firmware for your CD writer (from the manufacturer) first, and that it is included in the huge AmigaGuide file of supported devices. You'll find this file on our CD in the *MakeCD* drawer, and also on the *MakeCD* website at http://www.core.de or on our CD.

PRICING POLICY

***MakeCD* has one of the most sensible pricing policies. Loosely speaking, it is Shareware. You can download it and use it for free. There are some obvious restrictions, but none that will prevent you from getting some use from the software and seeing exactly what it is capable of doing. The Shareware version will permit you to write CDs in TAO mode and to test-write them in DAO mode. You will not be able to change the Publisher name for any volumes you create, or give the volume a name, but you will be able to cut working CDs with up to ten tracks.**

For a fully registered version, you can either register direct with the authors for DM75 (or 115 for DAO) or in the UK it can be purchased from Hi Soft for £39.95, or £49.95 for the DAO version. Also look out for deals and special versions from Power Computing and Eyetech.

These are the prices for the private use version. Rates for software licensed for mastering commercial CDs are negotiable with the authors.

DEVELOPER: Angela Schmidt, Patrick Ohly (http://www.core.de).
SUPPLIER: Direct or from HiSoft. Bundle version available from Eyetech and Power Computing.
PRICE: From £39.95.
REQUIREMENTS: CD writer, hard disk.
Tested on: A4000/'060, A1200/'060 + Power Flyer, HP4020i, Mitsumi CR 2801, EZWriter CD-R, Power CD-R.

Pros and Cons

- + Thorough documentation.
- + Great value.
- + Easy to use.
- + Great audio support.

OVERALL VERDICT: *MakeCD* has won the battle of features and is now becoming easier to use. Try it now!

94%

CD-ROM Writers

Make you own CD-ROMs, or drink coasters, with Nick Veitch

Mitsumi 2801

This Mitsumi mechanism is IDE based, and therefore of particular interest to A1200 owners. It can be connected to an A1200 via the ribbon cable trailing out of the casing method, though it would be advisable to use some sort of buffered interface, or perhaps a Power Flyer. The latter is recommended if you intend on the fly usage, especially when transferring data from another drive on the IDE interface. A fast processor is still needed to make this work reliably.

With an 8-speed read time in addition to double speed write, the unit is handy as a normal CD-ROM drive too. In tests, the double speed write proved reliable with a fast processor ('060) – whether you'll be able to manage 2x depends on a number of factors, including where you are reading the data from, what sort of data it is, buffer usage, etc. I've been assured by one of the authors that *MakeCD* had no problems with this drive on a plain A1200.



The Mitsumi is an all-round good choice for ATAPI-based CD writing.

This CD-R is one of the drives the authors of *MakeCD* used to create CD-R drivers, so it should work flawlessly with that software. It should also work with version 2.1 of *MasterISO*. The CR2801TE doesn't support DAO writing through *MakeCD*. The drive itself does, but *MakeCD* doesn't support DAO on Atapi drives, although you can write TAO without a gap between the tracks.

In appearance, the drive is what you might expect; an understated, simple front panel has a volume control and headphone socket with two lights. One indicates a disc is in the drive, the other is green for reading, red for writing.

If you're thinking of using this drive as an internal unit, it's around two inches longer than a standard CD-drive and won't fit into a standard A4000 bay.

Eyetech's EZWriter is essentially a Mitsumi CR2801 housed in an external case. The unit is connected via a ribbon cable from an IDC header at the rear of the case to the internal workings of your IDE interface, preferably via some sort of buffered IDE splitter. The new SE version is a "no-frills" option, lacking the rear panel audio connectors. An audio kit is available separately for £19.95.

The CD-R writer currently featured in Power Computing's adverts is also based on the same Mitsumi mechanism, but the case has audio outs and a transformer-based PSU. For a bit more cash, Power are also selling the drive complete with a buffered interface, three Kodak CDR74 discs and a copy of *MakeCD3.2*. The *MakeCD* software is also supplied by Eyetech with all versions of the EZwriter. CD mastering has never been cheaper!

DISTRIBUTORS: Eyetech (01642) 713185 or Power (01234) 851500
PRICE: £269.95 (EZWriterSE from Eyetech with *MakeCD*)
£259.95 from Power (or £299.95 with buffered interface, three blank CD-R discs and *MakeCD*).

OVERALL VERDICT:
A good value drive for those stuck with an IDE interface.

90%

Power Dual CD external

The Power Dual CD external box is like a mini tower unit, capable of housing two standard 5.25" drives. The drives that Power have chosen to include are the Mitsumi 2801 (exactly the same drive as above) and a standard CD-ROM drive.

The CD-ROM Drive is a Pioneer DR-A32X mechanism, one of the reasonably successful range of Pioneer CD mechanisms. As its title might suggest, it is capable of reading data at 32x (or 3600k/s), though in practise you are likely to be looking at slower transfer times, mainly as a result of the out of date IDE mechanism of the A1200, though a Power Flyer would enable the drive to go faster.

This particular drive also has a rather low seek time of 75ms. which again adds to the impression of speed. In practise, on an A1200 you are likely to find that this mechanism gives a level of performance similar to that of your hard drive.

It's stylish and surprisingly good value.



Although the above setup is ideal for doing duplicates of existing CDs or remixing your own audio discs into a personal "The best music we could get a good deal on at the moment in the world... ever, vol 64". Power will also be supplying this case with a hard drive instead of the CD-ROM, which would be an ideal place for ISO images or raw files waiting to be written to the CD.

Both drives are master/slave on one cable, so if you have an existing IDE unit, you will need a splitter or a Power Flyer (which can be bought at a special price if you buy it with this unit).

The Dual box itself is sturdy, stylish, has a kettle lead power in and through socket and audio outs on the rear. An integral fan keeps everything cool and it seems like the ideal solution to storing multiple external drives.

DISTRIBUTORS: Power Computing (01234) 851500.
PRICE: £389.95 (CDR and 32x CD-ROM), £429.95 with 2.1Gb HD.
TESTED ON: A1200 '030, Power Flyer with '060.

OVERALL VERDICT:
Probably the best multi-drive solution for A1200 owners, and at this price, good value too.

92%

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68040/25 & FPU	£139.99	£149.99	£154.99	£164.99	£174.99
68040/40 & FPU	£189.99	£199.99	£204.99	£214.99	£224.99
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Reader Reviews AMOS

Nick Chapman puts the ageing Amos programming language to the test.

Poor old *AMOS*. The world and his wife have kicked this once-great programming language to death. Nowadays it is showing its age and lack of development. There is no AGA or RTG support, it cannot cope with modern music formats and many new Amigas need to be degraded to run it at all. It cannot properly handle Intuition screens or Workbench and its hardware-hacking ways are too slow.

> ... everything is explained so clearly, with a logical order and helpful tutorials, both on paper and on disk.

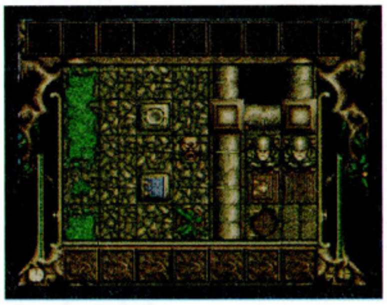
The reason for *AMOS*'s lack of speed is twofold. Firstly, it compiles each instruction as it encounters them and secondly it controls a lot of the Amiga on its own, under interrupts.

It does double-buffering with automatically-animating bobs and sprites with full collision detection, all under interrupts. Once *AMOS* has been told what to do, it gets on and does it, whether you like it or not. This slows the Amiga down a lot since it is allocating time for tasks that you do not necessarily want to be executed.

This method also makes for terrific ease of use. New users can concentrate on learning techniques while the tedious technicalities of the Amiga are dealt with behind the scenes.

Do not be fooled by the makers' claims, however. *AMOS* is useless for writing either arcade games or applications. Modern games need to be fast and smooth, whereas *AMOS* buckles under the strain of more than a couple of bobs. Only the most simple of games can be programmed effectively.

However, games with limited graphical activity, such as Vulcan's *Valhalla* series and *Hillsea Lido* are quite possible. Once you have reached this stage, however, you would be better off with a copy of *Blitz Basic* (which it is very easy to transfer to). As for applications, people only want proper Amiga DOS interfaces these days, even for PD. Forget *AMOS* completely here.





Vulcan's *Valhalla* series of games showed off the best of *Amos*.

So *AMOS* is the best introduction for those beginning to program. The manual is superb. It is seven times the size of the *Blitz Basic* manual, simply because everything is explained so clearly, with a logical order and helpful tutorials, both on paper and on disk. The on-line help system is great, with links to an example for every command. The debugger is the most user-friendly I have encountered. Couple this with the supplied sprite, animation and menu editors and *AMOS* looks like a very well-rounded package.

It is sad to see that development has stopped on *AMOS*. Even new PD libraries are hard to come by these days. One of *AMOS*'s plusses was that someone was always bringing out a new library to help with commands that would be hard to construct routines for, such as 3D support and ability to load in *Player6* modules (a modern, compact *Protracker* replacement format).

There are also a couple of libraries around which claim to add AGA, Reqtools and Intuition support. Some of these work, others are slightly incomplete. The original AGA library, for example, cost £10 and didn't even allow bobs on AGA screens, making the whole effort a total waste of time. With a full arsenal of these add-ons, *AMOS* becomes very powerful, but, unfortunately, just as slow as ever. Die-hard *AMOS* fans are still pleading with Europress software to release the source code so that it can be updated, but their efforts have been in vain.

To conclude, *AMOS* is the ideal way to teach yourself programming. The end results can be disappointing, and for goodness sake, do not plan to write your masterpiece here. I often wonder if my now-unused *AMOS Pro* disks were a waste, but of course they were not.

Through the brilliant demonstration programs (including *Tetris*, a shoot-em-up and a platformer) *AMOS* taught me the skills I use all the time today in other languages. Look at where it got Vulcan Software!

If you ever fancied a bash at programming but felt a little daunted by the likes of assembler, get a copy of *AMOS*, and, with a little time, your dream will come true.

Make sure you get *AMOS Pro*, by the way, since other versions have less commands and are no easier to use. A compiler is also available which makes stand-alone executables, and these are also a lot faster.

BEN'S VERDICT

Of course, there's apparently a movement afoot to bring *Amos* into the new century with PPC support and the like, but the bog standard version that everyone has is not to many people's taste when it comes to running the programs. Personally, I won't even run something that has an *Amos* icon if I can help it, and I'm sure I'm going to get a lot of hate mail for saying that...

YOUR REVIEWS

Have you got any software or hardware you couldn't live without? Got any that you'd happily chuck in the bin? Write a fair and accurate review of about 750 words and you could see your work appear in *AF*!

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***Amos Pro* is no longer available. Try using our free Reader Ads service.**

OVERALL VERDICT:

This is the best introduction to programming around. The manual is superb but the results can be disappointing. If only *Blitz Basic* had a better manual...

75%

Rexecute

A compiler that makes your scripts run faster? Nick Veitch is interested...

ARexx is without a doubt one of the best kept secrets of the Amiga operating system. While Workbench itself doesn't support it (yet!), almost every other bit of commercial software does. This means that you can write scripts to perform all sorts of otherwise tedious tasks, and also control one program from within the confines of another.

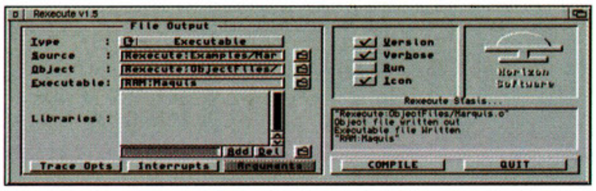
As an example, when we did a feature on stocks and shares I wrote an ARexx script which, every working day, connected to the Internet, downloaded share price information, processed it, opened *AmiBroker* and loaded the data.

Rexecute takes the functionality of these scripts further by compiling them into executable programs. This has two immediate advantages. The first is that it runs a great deal faster than the original script as it is a compiled executable. The second is that it is impossible for prying eyes to look at or alter the code, which might be useful if the ARexx program is the basis of some commercial product or Shareware release. Obviously, the major disadvantage is that you can't then alter the programs unless you alter the original source and recompile it.



Speeding up scripts for applications like *PPaint* is one use for Rexecute.

This isn't a major problem for scripts which you use often without changing them, such as those which come with *PPaint7* or the ones for your favourite wordpro, although you will have to write short loader scripts as these programs will call the RX command to execute the macros.



The compiler is neat, provides object code for use with C programs and compiles the admittedly short average ARexx script in the twinkling of a gadget press. There are full tracing facilities and you can even use it to generate linkable or runtime libraries.

I deeply dislike the big splash screen which appears every time you run the software, mainly because it's a waste of time and chip RAM. The font rendering seems suspect, some of the demo scripts assume where you have installed the software (SYS:) and the GUI is a bit suspect. However, in terms of actually producing executable scripts, it works just fine.

SUPPLIER: Weird Science (0116) 2463800
PRICE: £19.99
REQUIREMENTS: ARexx, Hard drive

OVERALL VERDICT:
Not perfect, but it does its job well.

84%

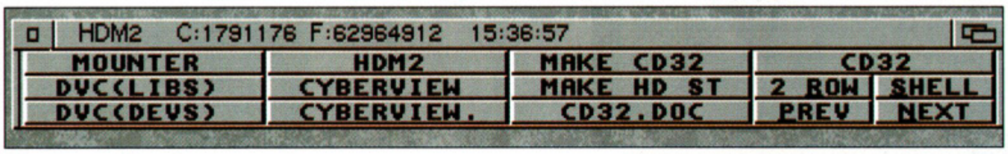
HD Menu II

Get your your applications to start up the easy way, with Nick Veitch.

Those of you who want the functionality of a *Directory Opus* floating button bank, but are too tight to actually buy *Directory Opus* (or don't have enough memory, have an aversion to Australians or any other reason), may be interested in this.

Essentially, it's exactly that: a button bank which sits on your Workbench, that can be used to perform functions and launch other applications.

It's useful because it is a rather small, memory efficient, proper commodity and it can be configured to do all sorts of complex tasks. However, I am naturally suspicious of People Who Arbitrarily Capitalise The First Letter Of Every Word On The Box Artwork. And, perhaps more to the point, you have to ask what makes this particular button bank-type application any better than the dozens which are available as Shareware or Freeware from Aminet.



It's a commodity and it's easy to add items to the bank, but is it better than the Freeware offerings?

> It is probably better in terms of reliability, functionality and efficiency than anything you might find on Aminet...

The answer is, sadly, not a great deal. It is probably better in terms of reliability, functionality and efficiency than anything you might find on Aminet, but it isn't really sufficiently different to make it worth buying.

It is nice that you can simply drag applications on to the bank to add them, and that you can switch between various layouts and orientations. It is also quite well documented and it genuinely seems to be a lot less flaky than your average bit of Freeware.

However, at the end of the day, *ToolsDaemon* is just as easy to set up (with the advantage that you can easily re-shuffle all the entries), and if you really like floating menu bars, I would keep saving and buy *DOpus Magellan*.

The thing that clinches it for me is that if you install *HDM2* as a WBstartup commodity, you get treated to a huge Horizon Software splash screen every time you run it, which is extremely tedious and unpleasant.

SUPPLIER: Weird Science (0116) 2463800
PRICE: £9.99
REQUIREMENTS: Hard drive

OVERALL VERDICT:
It works, but so do most of the ones on Aminet. It's cheap, too.

64%

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Amiga Service, Office 309, Bumazhnaya Str 3, Sankt-Peterburg, 198020. ☎ 812 1868842. A1200 hardware.

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CD EXPANSION

I own an A600 with 2Mb RAM and a 170Mb hard drive. I want to buy a CD-ROM drive for my Amiga, but as I have only recently started using my Amiga for serious use instead of just games, I am unaware of what I will need to operate a CD-ROM. Could you please tell me what I would need, as well as advising me on a good priced product as I don't want to spend a great amount on software?

Also, could you explain the different types of CD-ROMs, IDE, SCSI, etc? Which would be best?



Good IDE/ATAPI CD-ROMs are available very cheaply.

I would also like a sound sampler but I don't know if they are compatible with A600s, where to get them or if they are expensive. Is any software required to run them?

Gordon Walter
Dublin

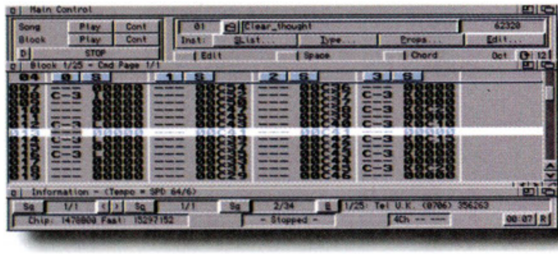
To use a CD-ROM drive you need the mechanism itself, a power supply and case, some connection cables, an interface to connect it to the Amiga and some driver software. You can pick up all this lot for under £100 from Power Computing, Eyetech or several other Amiga dealers.

For this price you will get an IDE/ATAPI CD-ROM mechanism. SCSI CD-ROM drives are considerably more expensive and the benefits of SCSI are only clear if you are building a larger system, probably housed in a tower case.

Sound samplers are compatible with all Amigas and usually attach to the parallel port. HiSoft and Power Computing both sell the hardware and it should come with basic editing software. If not, there is plenty of good Shareware or Freeware to choose from.

SoundProbe *is the best commercial editing software and you can buy it in a bundle with a sampler from HiSoft.*

MAGIC MUSIC



A sampler. Most have very similar features so go for a bargain.

I recently bought the Amiga audio CD *Digital Grooves* from Audio Works. Having been blown away with the quality of the music found on this CD, I have become very interested in how I can create such music myself. I own an A1200 and would be grateful for any advice regarding the best music packages, samplers, etc.

Having spoken to Audio Works on this subject, I was told that David Dewar (the CD's composer) only used *OctaMED v3*. If so, could you tell me if and where this package is available?

Neil Sharpe
Streatham

The Amiga is still a very capable musical composition tool. Samplers are very similar in quality but try HiSoft as they seem to have some special offers on at the moment. They are also selling MIDI interfaces cheap in case you are thinking of expanding your musical set-up to incorporate a proper musical keyboard or some external sound hardware, such as a synthesiser or drum machine.

OctaMED *is certainly still in development and has become* OctaMED Soundstudio. *The latest version remains v1.03c and it can do remarkable things like replaying up to 64 sounds at once through the Amiga's standard hardware. It's available from* http://www.octamed.co.uk, *or from RBF Software, 169 Dale Valley Road, Hollybrook, Southampton, SO16 6QX.*



The Amiga is still a superb piece of hardware for making music and the *OctaMED Soundstudio* should satisfy most of your needs.

68060 PROBLEMS

I have an A1200 with a Conner 420Mb hard disk and I've just installed a Magnum 68060/66 with 8Mb. My problem is with *Blitz Basic 2*. Everything works fine until I want to compile anything, then it crashes my machine.

Things that I've already programmed work so it must be something about mistakes in newcode. Even when everything works first time, if you try to compile a second time then it's Guru time again.

This is obviously a compatibility problem with my '060. Is there a patch or something I could get, or a certain Cache setup that will stop the problems?

Leon Pennington
St Helens

A nasty problem indeed. No-one promised that the 68060 was going to be totally compatible with all Amiga software, and sadly Blitz *seems to have stopped development. You could try turning off your processor's caches and running the very latest* SetPatch *you can find. Other than that, I'm afraid I don't know what to suggest.*

CRUEL AND UNUSUAL

I have been in prison for just over two years and it has been that long since I've bought *Amiga Format*. Being in prison meant that I have been forced to use PCs, which is far worse than the punishment of having my freedom taken away from me. Anyway, while using these PCs I have come to notice that all the prices for printers and scanners in the PC market are much lower than those advertised for the Amiga.

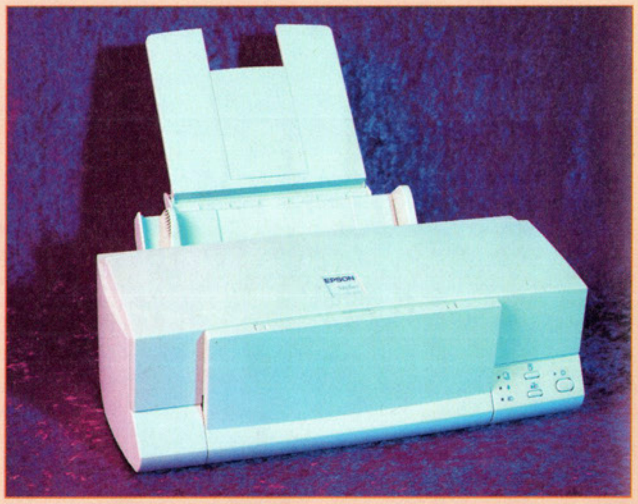
Can I buy an Epson GT5000 scanner and an Epson Stylus 600 printer from a PC dealer and be sure of finding suitable drivers for them? Would *Turboprint 6* support the Epson range of printers, including the Photo 700? Finally, could you tell me if *Sensible World Of Soccer 96/97* is hard drive installable?

Capablance Ashbourne

Yes, you're going about it exactly the right way if you want to save money. First track down the software for the hardware you have your eye on, then buy the printer or scanner as cheaply as possible.

Of course, when you buy something from an Amiga dealer you can be sure that you will get some kind of support. For this reason, the cheapest option might not always be the best deal.

I recommend you contact an Amiga dealer like Eyetech to get a price for a scanner or printer and the associated software. You might get a better deal than you realise, and you'll certainly get better support. A Shareware installer can be used for SWOS 96/97.



For an in-depth guide to printers, printer software and drivers, see our roundup in issue 109 – call our back issues department on 01458 271102.

DOUBLE DRIVES

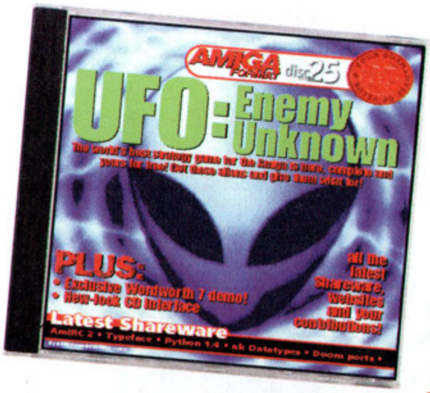
I have an A1200 with an Apollo 1240/25 accelerator and a 4Mb SIMM, a 4x speed Compaq CD-ROM drive connected via a Squirrel SCSI interface and a 340Mb Toshiba 2.5" internal hard drive. I'd like to know:

1 Is there any way of connecting my old double speed Zappo CD-ROM drive to my system? It used to connect via the PCMCIA port where the Squirrel is now.

2 How can I make *AFCD25* work on my system as the CD-ROM drive won't recognise it?

3 Is there any software available that will utilise the photographic printing capabilities of my Canon BJC-240 colour bubblejet printer?

Andrew Hunter
Chorley

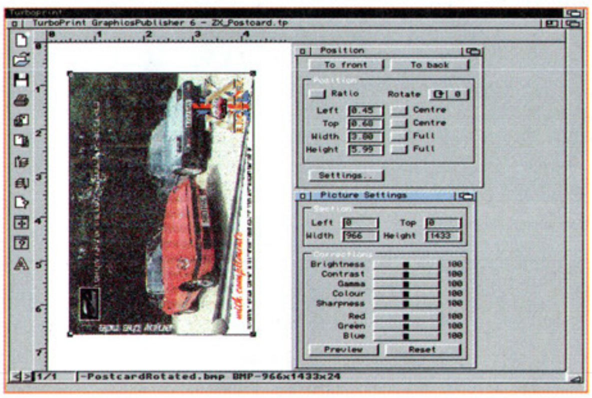


Out of date CD-ROM filing systems could cause recognition problems with our coverdisc.

1 You can only use the Zappo if it is a SCSI mechanism as you can chain up to seven SCSI drives to one interface. However, I suspect that the Zappo is an ATAPI/IDE drive, in which case the simple answer is a "no".

2 You need a more up-to-date CD-ROM filing system. We usually put several on the magazine coverdisc.

3 Wizard Development's/EyeTech's TurboPrint 6 *claims to support a huge range of printers, including latest Canon models. Should be worth a try.*



The *AF* Gold *TurboPrint 6* software should support most printers.

PARNOT

I want to use my CD player with my A1200 so I bought a new parallel lead and *PARnet* software from Weird Science. The problem is that the A1200 won't talk to the A500.

I've tried everything. I know the lead and software both work as I have connected my A500 to my wife's unexpanded A500 with Workbench 2 and they connect up together with no problems. Is there a way in which I can test the parallel port on my A1200?

Tony Noble
Milton Keynes

I would really check the software before assuming the worst about the A1200's parallel port. Make sure you have the very latest version of PARnet *and that the software is supposed to work with Workbench 3.0 and a 68020 processor.* PARnet *can be stupidly picky at times and it's worth persisting. The best way to test the parallel port is to use something connected to it: any printer or a sound sampler, for example.*

Feedback

Many thanks for answering my son's letter about the problems with his IBM hard drive (Workbench, *AF113*). It may be of interest to other readers to learn of an alternative method of ensuring that programs work from these drives.

After suffering increasing frustration at his lack of success with the various programs mentioned, like *PPaint* and *DOpus*, and knowing full well that he had no problems with these programs running on his original hard drive, he found that an archived backup copy of *PPaint* he had on a floppy disk worked perfectly when unarchived to his hard drive partition using the *DZA* utility which he had been experimenting with. Bingo!

Now every program will run, provided it is first compressed with *LhA* or *LZX* and then decompressed to the hard drive. He is now content with the drive but can anyone explain why all this is necessary?

Michael Williams
Westcliff on Sea

I'm writing with regard to the letter sent in by Unknown of Lancashire (*AF113*), asking about using a long IDE cable so they can put their CD-ROM drive into a Midi tower. Your answer surprised me as I have already done this with a mini tower and desktop case, which I am using now. I've got both my HD and CD-ROM drives in the case, separate from my A1200.

The lead I'm using is just over three feet long (after connecting a three footer to my Amiga to PC lead). I haven't had any problems with my HD or CD drives since doing this just over a month ago. All I need to do is find a way of fitting my A1200 motherboard into the desktop case. As for the CD-ROM, I found it best to have it as an active device on a pull down on Workbench instead of activating on startup as it's two seconds faster.

Jamie Stockdale

You canny change the laws of physics, as someone once said. I'm glad your extra long IDE cable is working, but it's not designed for this. Make sure you have a good buffer card fitted to your Amiga's IDE port.

DEVELOPMENT FRENZY

I recently sold my PC and made a nice profit too. I used to own an A1200 back in 1992 and I want to get back into the Amiga way of things and never have

Continued overleaf ➡

anything to do with PCs and the M word any longer. I have £1,200 to spend on a new system, so could you advise me on the best one to get? The only constraint is that I must have a 17" monitor due to the high resolutions I'll need for some of my planned projects.

I'd also like to know if *Devpac*, *HighSpeed Pascal* or *Blitz Basic* have been updated since 1992. I have versions 3, 1 and 1 respectively. As a systems programmer, I have been using *TASM* and *Delphi* very heavily for the last three years and was wondering if there were any new programming products available. I'm particularly interested in *FORTH*. Thanks for your help, it's great to see that *AF* is still going.

Russell Willis
Newtownards, Northern Ireland

AF is still going, and still going strong. Sadly, the same can't be said about Amiga development languages. Pascal *and* Blitz *have more or less died, but* DevPac *is still being sold and supported by HiSoft.*

It's still at v3 I believe, although you should contact HiSoft to see what minor upgrades there have been. It's included as part of the Storm C++ *development package. The real action lies with* C++ *and PPC cross-compilers at the moment.*

There is still no real visual development language like Delphi *anywhere in sight, which is a crying shame. Something like that could have revolutionised the Amiga. As for* FORTH*, there is little need for this language on the Amiga. Compact and fast it may be, but trying to store OS structures on a RPN stack could hardly be described as a sensible thing to do. Or "do to thing sensible a", as a* FORTH *programmer might say.*

You must be the only person ever to have sold a PC for a profit and I hope you enjoy your spending spree. Get the monitor first, then track down an A4000 Tower. Buy a new graphics card and a Cyberstorm PPC board. Add the biggest hard drive and a truck load of memory and you'll have a monster machine.

10 things to do when:

You want to draw on the Amiga.

1 *Deluxe Paint*. Many computer artists started out with this software. Someone you know is bound to have it.

2 Hunt out a graphics tablet. No-one can draw easily with a mouse. Try signing your own name and you'll soon see.

3 Get a scanner. That way you can draw sketches on paper, then scan them into your Amiga to act as the basis of your drawings.

4 Software. You have a huge choice, including up-to-date versions of *Personal Paint*, *ArtEffect*, *Photogenics* and *ImageFX*. Different packages are more suited to different aspects; some suit painting, others manipulation of images.

5 Get a graphics card. Adding a graphics card makes a huge difference to the speed of your Amiga, especially when dealing with large, 24-bit graphics. HAM8 is nice, but slow.

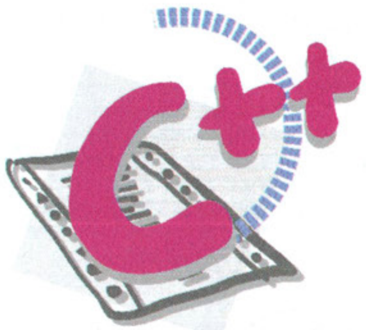
6 A big monitor is essential, especially if you have a graphics card. Make the most of it with a 24-bit colour display of 1024 by 768 or larger.

7 Get more memory. An Amiga has a limited about of chip RAM – the memory used to store graphics. Add more memory to free-up chip RAM and your Amiga will run faster as a result.

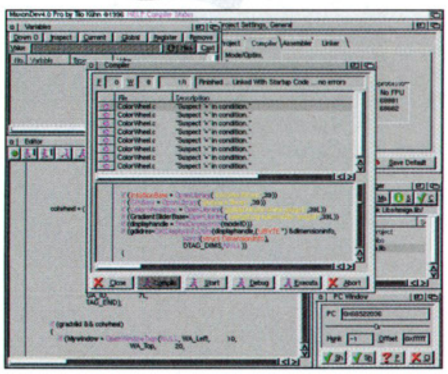
8 More power. The fastest processor you can afford will make life a lot more enjoyable. Some graphic processes, like filters, can seem to take forever, especially if you don't have an FPU.

9 Get on the Internet. Not only will you find lots of graphics tools, you can also put your work on show on your own web pages.

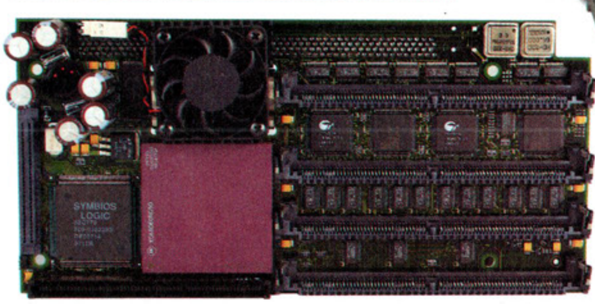
10 Sort your output. Colour printers are very good value at the moment, and with software such as *TurboPrint 6*, you can make the most of their near-photographic quality output.

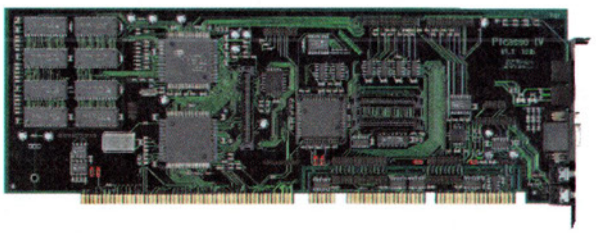


£1,200 to spend on your ideal Amiga set up, funded by selling your PC, sounds like a dream come true!









STUDENT HARDSHIPS

I have a revision 1-D4 (slightly odd) A1200 with a RAM8 expansion and a 1.2Gb 3.5" Seagate hard drive.

1 My first problem is with the hard drive. When loading data quickly, spooling animations from disk, copying big (1Mb+) files around partitions and using some applications, like *Scout*, *Web Plug*, *Wordworth*, *SoundProbe*, etc, the hard drive makes a loud clicking noise and temporarily stops data transfer.

When this happens in rapid succession, such as spooling animations or using VMEM, the hard drive motor seems to lose speed and then winds back up again. This doesn't sound healthy.

Raising the max transfer to 0x0ffff helped but did not solve the problem. This should give me 2.5Mb per second but I only get around 300K.

2 Is there a cable that can directly convert from a TV aerial to my Philips CM8833 monitor without going through a SCART video or the TV amazing?

3 I need more CPU power and an MMU for VMM and *Enforcer*. I

FIRST STEPS

Please forgive my ignorance but I am a total beginner with little knowledge of Amigas. I recently bought an A1200 with 8Mb RAM/FPU/RTC board, but only 4Mb RAM, totalling 6Mb.

I have decided I would like to add more memory, to a total of 10Mb. A friend told me if I wanted to upgrade to 10Mb then all I had to do was buy 8Mb SIMMs instead of buying a new 8Mb RAM board. Is this correct? I also have a CD drive fitted to a SCSI Squirrel via the PCMCIA slot. According to some adverts in *Amiga Format*, upgrading to 8Mb is not PCMCIA compatible. Can you enlighten me about this?

Peter Conroy
Cambridge

Welcome to the world of the Amiga, and don't worry – if think the Amiga is confusing, you're lucky you're not dealing with PCs! How you go about upgrading your new system really depends on the hardware you currently have. Most memory expansions are achieved by using a slot-in card, fitted with a SIMM, although some expansion cards have memory mounted directly on to them.

If you look at your card it should be obvious if you have a SIMM or not. If you are lucky there will be a second, empty SIMM slot, but it's more likely that, as your friend suggests, you'll have to take out the existing 4Mb and fit an 8Mb SIMM in its place.

As for the Squirrel, it's certainly true that some expansion cards can cause problems. Some cards don't map the second 4Mb of an 8Mb expansion properly and this causes a conflict with the PCMCIA port. The result is that one or both won't work. You can tell if this is going to happen in one of two ways. The first is to simply try it. The second is to look at the card, determine the make and then contact the manufacturer.



Having a Squirrel attached to your Amiga can occasionally cause you to have compatibility problems.

fancy an Apollo 1240, 25MHz. However, these things apparently get quite hot and guzzle power.

Can I splice more power from my FD port (I have a 3.5" HD) for the fan as I don't have the cash for a tower (thank God *Enforcer* and *Dice* are free). Will it take my double sided SIMM from my RAM8 or would a 1230 be sufficient for *Doom* clones and programming on a small student grant?

4 What about putting *SimCity 2000* on your coverdisks, even if the later levels have to be on the next issue? It's impossible to get hold of these days.

5 What are the chances of Gateway putting the ROM kernel, Library and Device manuals, etc, on their website as RTF as a thank you to the people who have supported their intellectual property and profits, and because most of them are out of print? After all, it's not like they're selling any or losing any royalties over it. All they could do is help the Amiga community.

Matthew Fletcher
Leicester

1 *Hard drives shouldn't make loud clunking noises if they are working well. I do remember a few that made worrying noises when bored: they would give click when moving their heads out of harm's way.*

However, this most definitely didn't cause the motor to change speed. I would be worried if I were you, and would suspect the power supply isn't up to powering your drive.

It's also possible that the drive is being squashed if it is shoe-horned into the A1200's casing. The drive is operating slowly but the IDE port isn't fast, especially when no accelerator card has been fitted. An '030 would make a big difference.

2 *You mean you want to turn your monitor into a TV by simply feeding it with the cable from an aerial? Without using a TV tuner? Sorry – can't be done. You need some way of extracting the TV signal from the RF signal. How would you tune it, for example? TV tuner boxes occasionally turn up for fifty quid or less, so keep your eyes open.*

3 *You can't get something for nothing (as a student you should know this) and just because you borrow power from the floppy drive doesn't mean you are pulling it out of thin air. You will need a larger power supply, and as this could be the root of your hard drive problems, this is a priority before you think about a 68040 card. If you do get the 68040 card, your SIMM should work fine as long as it's not stupidly slow.*

4 *Copyright laws, I'm afraid. We don't own* SimCity *and the people who do are still making money from it, so they aren't likely to want us to give it away. Then there are the rules for putting full games on magazine coverdisks. Honestly, we'd do it if we could.*

5 *I don't know about Gateway, but five minutes with a search engine is all you need. Apparently…*

IF YOU HAVE A QUERY…

At *Amiga Format* we aim to answer as many questions as possible. Unlike some magazines, we don't just concentrate on our areas of expertise – we take on all your problems (as long as an Amiga is involved).



John Kennedy.

Here are a few tips on sending in questions:

- Be concise.
- Detail the problem as best as you can.
- Describe the events that caused the problem.
- Give full details of your equipment.
- Make sure your question is relevant and wouldn't be more easily solved by contacting the dealer from whom you bought the goods.

Bear these points in mind and fill in, photocopy, or copy the form below as best you can. Unfortunately we cannot reply personally.

Send your letters to Workbench, *Amiga Format*, 30 Monmouth Street, Bath, Avon BA1 2BW.

Your Amiga:

○ A500 ○ A500 Plus ○ A600
○ A1000 ○ A1200 ○ A1500
○ A2000 ○ A3000 ○ A4000

Kickstart version

○ 1.2 ○ 1.3 ○ 2.x ○ 3.x

Hard Disk: .... **Mb**

Manufacturer: ....

Extra RAM fitted – type, size, (Mb) and manufacturer:

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Details of other hardware:

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Dave Cusick discovers a little family history using the Internet.

The surname Cusick isn't amongst the most common you're likely to encounter, but on several occasions over the last few years I've received emails from other Cusicks online. These messages are generally along the lines of, "I ran a search using my name in such-and-such a search engine and out came your page." But it's also not unusual for them to ask whether I know much about the history of my family and whether we might be distantly related.

> "... many of the sites offer interesting and useful advice for budding genealogists, so don't dismiss them instantly."

The answer to the first question is no, I don't know much about it, but I've become increasingly interested in finding out exactly how many online Cusicks are actually my relatives. The obvious place to conduct a little genealogical research seemed to be the Internet, but don't worry, I'm not about to start advocating responding to those irritating "Learn all about your family history" pieces of Spam email. There are plenty of places on the Web where you can obtain free information which can help you piece together a little of your family history.

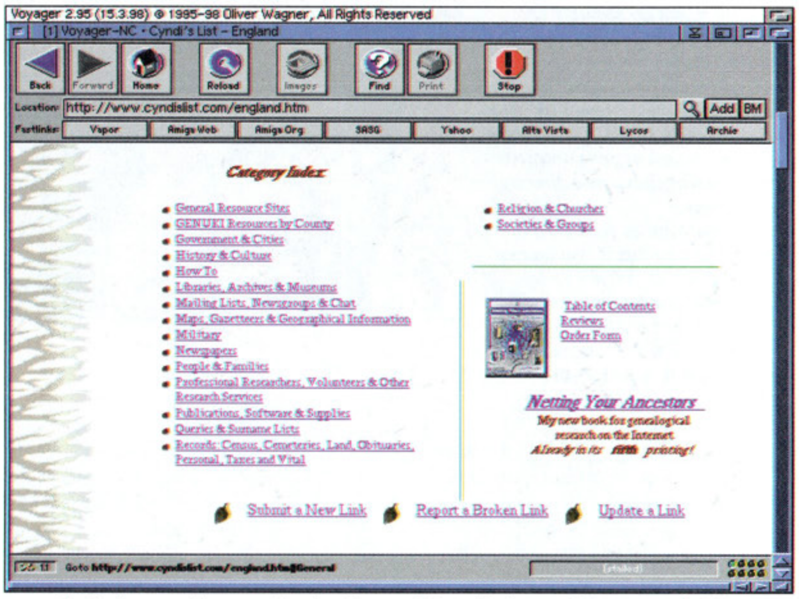
As with most subjects, if you run a web search using "genealogy" as your key word, the vast majority of the sites you'll unearth will be American. The situation is even more extreme than normal because in the States (which is, after all, quite a young country) attempting to trace your family history is enormously popular.

However, many of these sites offer interesting and useful advice for budding genealogists, so don't dismiss them instantly. What's more, some of them provide excellent pointers to some less well signposted English genealogy sites. Take Cyndi Howells' site, for instance, which contains a page that lists more helpful English resources than any other site I've come across (http://www.cyndislist.com/england.htm).

As a total newcomer to genealogy, I was particularly interested in obtaining the advice of the experts. The Gen-Newbie site features a series of lessons

CONTACT POINT

I can be reached with comments, suggestions and feedback at dave@dcus.demon.co.uk, or via my website at http://www.dcus.demon.co.uk/.



With over 1,000 hits every day, the UK and Ireland Genealogical Information Service is a very popular and useful site.

CUTTING THE COST OF CALLS

Over on the other side of the pond, the growth of the Internet has been nothing short of phenomenal. A huge number of Americans regularly spend hours at a time online, and the range of services now available on the web is positively flabbergasting.

In the UK, while the net has gained a high profile in the last couple of years, there is still a very long way to go before the same sort of net penetration is achieved. A major barrier, many maintain, is the UK telecommunications companies' insistence on making customers pay for local telephone calls, which have been free for years in the States.

In an effort to persuade OfTel, the telecommunications regulator, to do something about the current situation, a group has been formed called the Campaign for Unmetered Telecoms (CUT). On their homepage at http://www.unmetered.org.uk you can learn exactly why they think it's high time that BT, Cable & Wireless and some of the other major players began providing free local access, thereby enabling UK Net users to spend a great deal more time online. If, after reading some of the articles on the site, you agree with CUT that it's time for change, you can register your support for the campaign.



All those who want free local telephone calls, and therefore cheaper Internet access, sign up here.



There are plenty of websites with newcomers to genealogy in mind.

in genealogy (which you can find at www.rootsweb.com/~newbie/page3.html), which are all in ASCII format so you can download them and print them out to read at your leisure.

The Journal of Online Genealogy also offers a series of articles which are extremely helpful, beginning at www.onlinegenealogy.com/begin/beginl.htm, and if it's FAQs you're after then there is probably no better place than John Woodgate's site at www.meertech.demon.co.uk/genuki/faqs.html.

> *"... Genuki receives over a thousand hits every day from people with an interest in UK family history."*

Basically, it's then a case of looking anywhere online for historical traces of your family. The Public Records Office has an interesting website at http://www.pro.gov.uk, and if you follow the link from the main index to their guide for family historians then you'll quickly get a feel for the sort of ways in which the Internet can help you. Their introductory leaflet for beginners is also available online.

One good way of tracing your family can be through the use of historical census results. A chap called Ron Taylor runs a site through which you can take a look at some of the names of people who moved from one area to another around the time of the 1851 census, a time when a great many families were on the move due to the industrial revolution. Ron's UK Census Finding Aids and Indexes can be found at http://rontay.digiweb.com/.

The UK and Ireland Genealogical Information Service (Genuki) is another worthwhile stopping point. Compiled from information supplied by over fifty volunteers, Genuki receives over a thousand hits every day from people with an interest in UK family history.

Information is sorted at four different levels, so on the top level you can specify whether you're interested in English, Welsh, Scottish or Irish information, while at the opposite end of the scale you can specify a particular town or parish. It's an immense site which contains a great deal of interesting data and you can find it at http://www.genuki.org.uk/

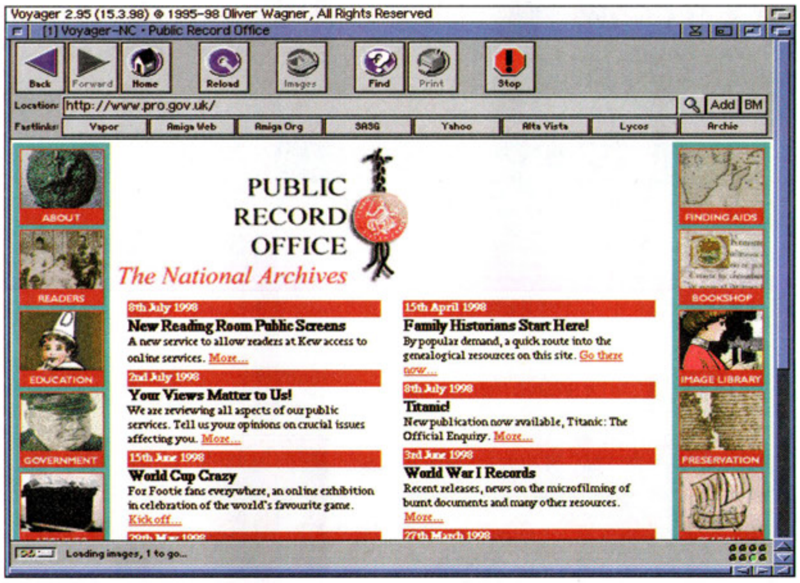
When you've actually got some details with which to start compiling your family tree, you could make the whole process a great deal simpler by using your Amiga because there are plenty of pieces of genealogical software lurking on Aminet.

Robbie Akins' *Scion* is probably the most obvious choice, mainly because it is fully featured and is free of charge. You should be able to find it on our CD and on Aminet at biz/dbase/Scion507.lha.

It is an understatement to say that it's highly unlikely that one Sunday afternoon sat in front of your Amiga will furnish you with enough information about your family history for you to be able to compile a definitive family tree.

Despite a great deal of digging, I'm little nearer to discovering exactly when the Cusick family moved from Ireland to England, or where they initially settled. Tracking the history and movements of your ancestors is obviously an exceedingly difficult and time consuming process.

What is clear, however, is that as with so many hobbies, a network like the Internet can play a very important role in helping those with an interest in genealogy to compare notes, exchange findings, offer one another advice and generally share their passion and experience with each other. AF

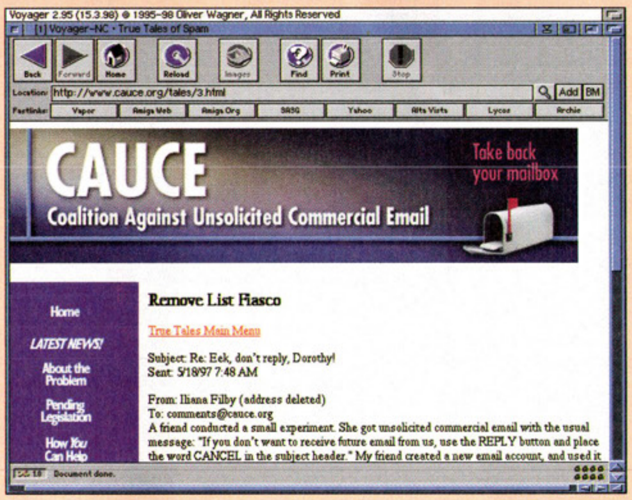


The Public Record Office is a good place to research family history, and it's on the net.

DAVE WRONG – IT'S OFFICIAL

A couple of issues ago I focused on Spam prevention in Amiga.net. In response to that, Doug Muth, Membership Co-ordinator of CAUCE (the Coalition Against Unsolicited Commercial Email) dropped me an email and pointed out that what I said wasn't entirely true. I suggested following advice in Spam messages to respond in order to have your email address moved from the Spammer's mailing list, which Doug reckons isn't such a good idea.

Doug says, "It has been shown time and time again that Spammers do one of two things with mail sent to the 'remove' address. They either ignore it or add it to their mailing list, since the email address that the request came from was obviously valid." Doug's got facts to back his case, too. For example, take a look at http://www.cauce.org/tales/3.html. With this in mind, you're probably better off not replying to those Remove addresses after all...



Warnings about replying to Spam can be found on the CAUCE website.

Visit us on the Web! - http://www.firstcom.demon.co.uk/

Open Late Wednesday & Thursday 9:30am until 7:30pm

Open Sunday 10:30 until 4pm

FIRST COMPUTERS

DELIVERY COSTS
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- Next Week Day £7
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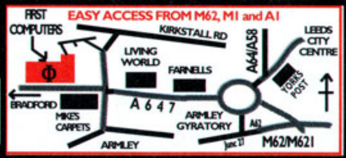
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Printiva Cyan	£6
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30x	£6.90	200x	£40.00
50x	£11.00	500x	£90.00

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30x	£8.70	200x	£48.00
50x	£13.50	500x	£110.00

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10x	£2.40	100x	£21.00
30x	£6.90	200x	£40.00
50x	£11.00	500x	£90.00

Branded DSHD

10x	£3.20	100x	£27.00
30x	£9.30	200x	£50.00
50x	£14.00	500x	£115.00

500 Disk Labels	£7
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CREATIVE

The indispensable guide to getting the most out of your Amiga



To everything (turn, turn) there is a season (turn turn), a time to laugh, a time to cry, a time to finish up some tutorials and start new ones. Okay, there isn't much of a connection between the seasons and learning how to draw icons or discovering the hidden secrets about Amiga graphics, but there is a time for them to come and go.

The graphics series finishes this month, and we are on the penultimate episode of our icon designing tutorial too. Don't worry though, because we have plenty of tutorials lined up, so if you're interested in MIDI music, IRC or HTML, stay tuned.

Of course, our other tutorials on C programming and the excellent Under the Bonnet series continue apace. You'll be surprised how much you can learn in a few pages! If you would like to see a series on a particular topic, please drop us a line.

Nick Veitch

SEND IT IN!

WE NEED YOUR INPUT.

Is there something that you would like to see covered in one of the current tutorial series? Why not send your suggestion to us at the magazine. Here are some things you might like to think about:

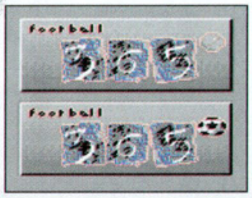
PROGRAMMING
Is there a language you can't get to grips with? Or maybe you want to know how to do a specific thing in C or ARexx? You might never find the answer unless you write in and tell us about it!

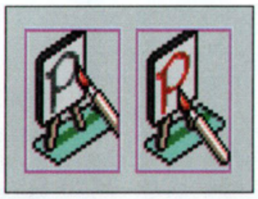
UNDER THE BONNET
Unsure of how how your Amiga really works. Not sure if you are getting the best from your hardware - write to us.

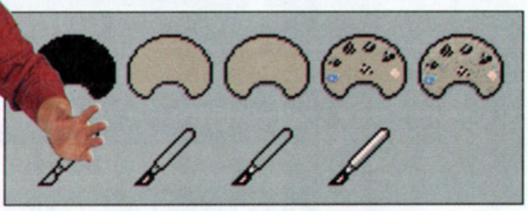
GRAPHICS
Is there something you desperately want to be able to draw? Drop us a line! Contact us at:

AF Creative • 30 Monmouth Street
Bath • Somerset • BA1 2BW
Or email: amformat@futurenet.co.uk
putting "Creative" in the subject line.

74 ICONS





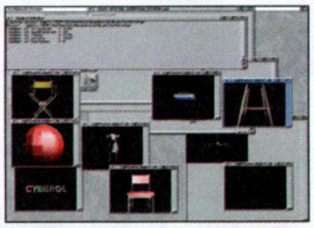


Icons. Everybody has them, not everyone knew how to make them – until now!

In the penultimate tutorial in this Illuminating series, **Ash Thomas** gives you some tips on making better icons.

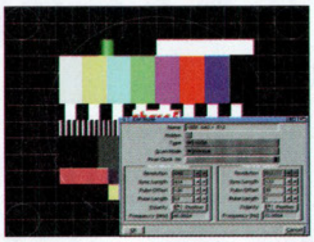


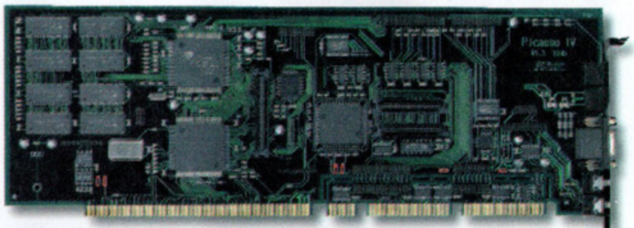
76 AMIGA GRAPHICS



In the final part of this excellent series, someone very clever discusses the ultimate image accessory, graphics cards – how they work and why you should want one.



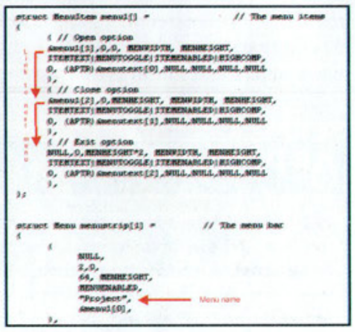




All the tracks, chips, resistors and connectors in a graphics card, like the one pictured here, result in a pretty picture for you.

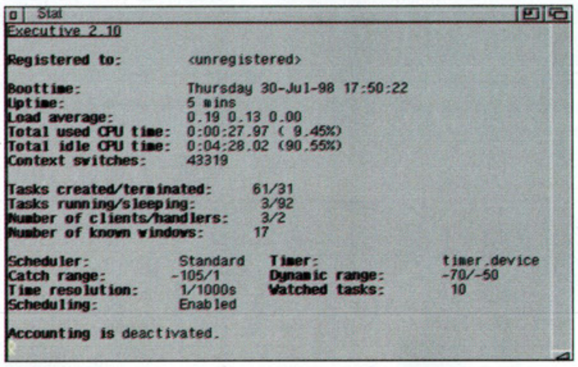
78 C FOR YOURSELF

Pull down menus are, er, on the menu in this episode of **John Kennedy**'s eye-opening series on programming the Amiga in C.



I think I'll have á la carte thanks.

80 UNDER THE BONNET


Stat
Executive 2.10

Registered to:	<unregistered>
Boottime:	Thursday 30-Jul-98 17:50:22
Uptime:	5 mins
Load average:	0.19 0.13 0.00
Total used CPU time:	0:00:27.97 (9.45%)
Total idle CPU time:	0:04:28.02 (90.55%)
Context switches:	43319
Tasks created/terminated:	61/31
Tasks running/sleeping:	3/92
Number of clients/handlers:	3/2
Number of known windows:	17

Scheduler:	Standard	Timer:	timer.device
Catch range:	-105/1	Dynamic range:	-70/-50
Time resolution:	1/1000s	Watched tasks:	10
Scheduling:	Enabled		

Accounting is deactivated.

Multitasking – how it works and how it could work better, according to systems expert **Simon Goodwin.**

Task scheduling with *Executive* can make things run smoother, but only if you set it up right.

Amiga Icons

How to add the finishing touches to your own icons, explained by Ash Thomas.

AFCD31:-In_the_Mag-/Icons
ON THIS MONTH'S CD

Contents

Missed a tutorial in this series? Call our back issue hotline on 01458 271102.

Artwork can take a long time to look the same way as you picture it in your head. To go from an idea to getting it onto the screen can take a lot of work. It is harder with icons as you have the extra restriction of space and every pixel counts. When your image would look great if only you had just one more pixel, it can be very frustrating. I have sometimes found that leaving hours of work alone and starting from scratch can prove to be beneficial, as sometimes the new image is much better than the original one. An amalgamation of both may also produce a perfect result, too.

> "I have sometimes found that leaving hours of work alone and starting from scratch can be beneficial..."

A good way to start drawing an image as an icon would be to get the shape of the object to fit into the icon's area. Once this has been completed the real drawing can begin without worrying if you are going over the edges. The shape will change as anti-aliasing is added, but the basic form will prove to be an indispensable guide.

An example would be my paint program icon that is a brush and an artist's palette. Firstly, I tried to capture the shape of an easel on an angle which was quite tricky to get right. Once this black object had found form I made an outline around the shape using the four compass points around the easel.

Using light colour at the top and the left and a darker version of the colour at the bottom and the right (like a button) I gave the easel some depth.

Quite quickly after the basic shape was defined, the image has started to look like what it is supposed to represent. Some basic anti-aliasing has been used to reduce the jagged appearance and some colours have been added as a guide. In the final version, I have added some depth below and used a wide variety of colours to be the splodges of paint.

The brush was relatively easy to draw and the cylinder shape was explained in an earlier tutorial, with a light reflection to make it look round. The brush part was coloured red with a

Our original logo, which needs to be resized and put into the *NewIcon* palette.



On the left are the original parts of the image and on the right are the improved versions.



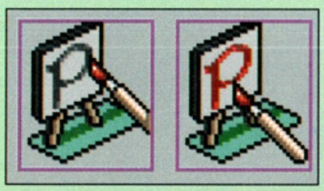


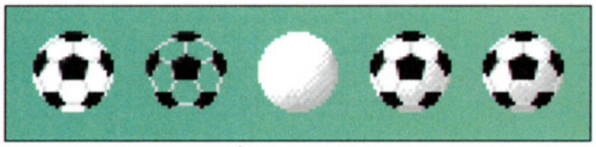
(Top) The image without any work done on it. (Bottom) The final version.

APPLYING TEXT

Putting text into a NewIcon can be tricky as you have to make it part of the isometric view. You would have to be a good artist to do this from scratch, but there is a much easier way. First, pick the font and do the text, then improve it by anti-aliasing it or adding shades of colour. Put a black box around the image and cut it out as a brush. Go to the Brush, Rotate, shear menu and drag it until the box is isometric (i.e. goes up one pixel for every two pixels across).

Tidy up the image and you have some great isometric text.

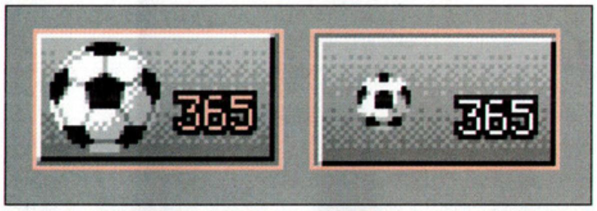




Parts of the *F365* icon. I have kept the patches separate so I can easily change the shading on the ball.

light source to make it look like it has wet paint on the head. The same technique has been used for a *MagicWB* icon and a screenshot shows the *MagicWB* version which was the original – doing flat objects is much easier!

Drawing the football for the *F365* program (http://www.football365.co.uk, by AmigaSOC) was quite simple. During the World Cup it wasn't hard to get a picture of a football (I spotted one on a leaflet at Tesco). I cut out the football,



A second version of the *MagicWB Football365* icon. This could be used for the data files.



The *F365* program icon. I used similar techniques for reducing and re-colouring the logo.

stuck it to the side of my monitor and drew a round shape. I then put the patches on the football, which was quite tricky as space was limited and each pixel felt huge. Some clever anti-aliasing was needed to overcome this problem and make the pattern look detailed. Some shading was also required to make the ball look 3D, but this wasn't drawn directly onto the image.

I manually darkened the bottom and right areas of the ball and then put the patches over the top. I did keep a copy of each part as I later decided that it wasn't dark enough, and more shadowing was easy to add on.



The final *MagicWB* icon with backdrop and the parts added to form the picture.

A challenging way to draw an object is to try to copy one from a picture. This is hard enough on a true colour 800x600 screen, but when you are limited to 32 or even eight colours and a definite size, this can be a real challenge. With the picture stuck to the side of your monitor you can work on getting the basic outline onto the icon, but even this can be quite tricky.

After seeing Aes's great icon of King Tut (which has been associated with the Amiga for years) I decided to draw my own. I was inspired when I got my hands on a picture of the real mask and started drawing the image. Unfortunately, I didn't keep subsequent versions of Tut as it would have been good for you to see how it progressed. The version on the screenshot is far from complete, but now I have the basic shape on the screen I can do the real artwork like shading, colouring and working out how the light will be reflected off his head.

> **"With the picture stuck to the side of your monitor you can then work on getting the basic outline onto the icon..."**



The King Tut icon I'm working on, which is about 30% finished.

Converting a big logo into an icon is a huge task and I have only done a few in my time. I have done the Picasso96 logo, the *Football365* picture and the AmigaSOC title. Being a member of AmigaSOC, I decided to convert their title into a *NewIcon* (sorry, but *MagicWB* just didn't have the required colours) for this tutorial. It can also be used on our products for the readme. The first job was to convert the image into one that uses the same palette as the icon set.

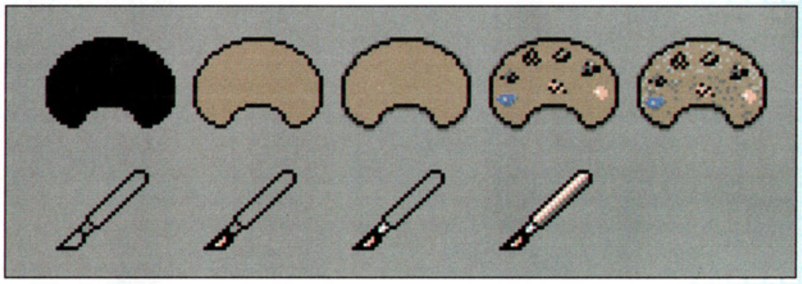
I cut out the 256-colour image out as a brush and used *PPaint*'s remap feature as I loaded it into my *NewIcon* image. The next job is to resize the image until it fits the icon size, and by now the image looks horrible. Don't give up here, though, as your artistic talents will make the logo look great. All you have is a guide of size and colour.

The best way to start is to separate each part of the logo and work on those parts. If you then put these pieces together the logo will look great.

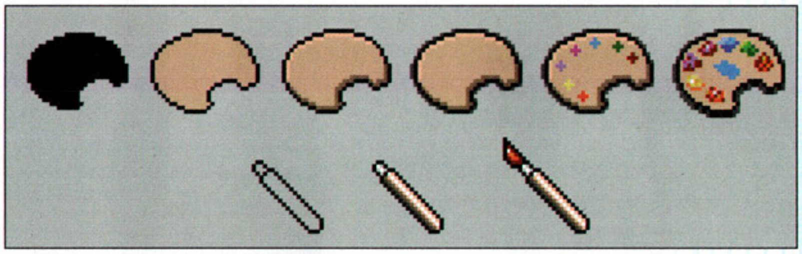
On the AmigaSOC icon I have split the image up into the "Amiga", the shadow to the Amiga, the "Soc" and the map of the UK. I started by filling in the missing parts of the Amiga logo and anti-aliasing the image to make it smoother. The map didn't need too much work; it looked a bit jaggy and had some holes in the land which were fixed to produce a good map of the UK. The Soc image had a lot of holes that you will always get with resizing brushes. These were filled in and the colours were redrawn to get a nice gradient effect.

Redrawing the shadow would have taken too long so I used the effect I have mentioned before. I pasted down the "Amiga" image and used the blur effect in *PPaint*. Some fiddling and size reduction later and I had an impressive shadow underneath the Amiga picture.

Each part was then overlaid in the same position as the original and the final icon looks much more impressive than the reduced version.



The paint icon in *MagicWB* colours and style. Note its flat appearance.



The development of my paint icon – each stage of the drawing process can be seen here.

CONTACTS

If you have any comments about the program or about this tutorial, email me at: ash@absurd.demon.co.uk.
I can also be found on IRC (ANet and IRCNet) as Abstruse.

Amiga Graphics

In the final tutorial in this series, Nick Veitch looks at different video and graphics cards.

Contents

Missed a tutorial in this series? Call our back issue hotline on 01458 271102.

Although the Amiga had phenomenal graphics power when it was released, as the years wore on it became apparent that some of the custom chips were actually a bit of a liability. Graphics cards, which had once been the preserve of video professionals, soon became desirable to more and more users.

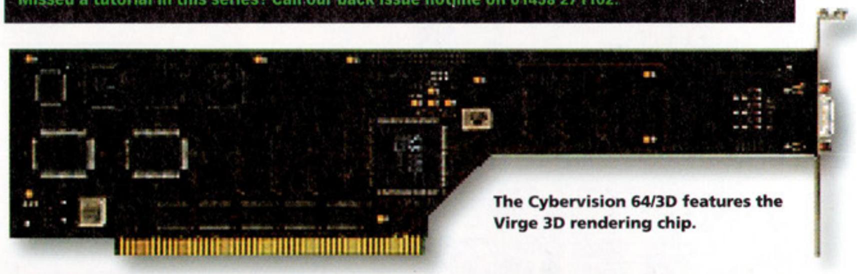
Even the AGA chipset can't display 24-bit images, and because of the nature of Amiga graphics, its deeper bitplane modes tend to be rather slow for a lot of purposes.

> "The real future for graphics devices may be decided by the course of development of the next Amiga."

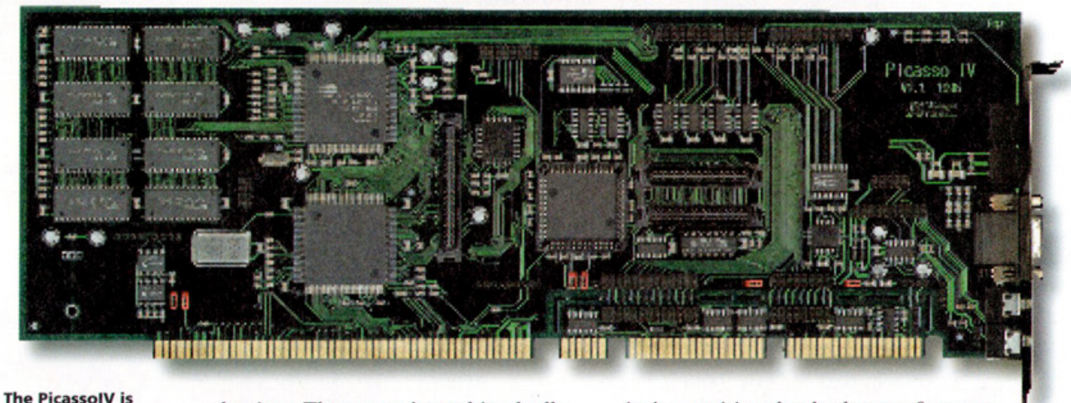
As we explained in part one of this tutorial, the way the Amiga internally stores and displays images relies on bitplanes. While this makes exceptionally smooth scrolling a doddle, it isn't quite so useful for work that involves primarily chunky objects, like software sprites.

Graphics cards address both the problem of speed and depth. All graphics cards have their own memory in which the display is stored. As it is local and addressed in a way that makes it easy for the graphics chip to access, the results tend to be faster.

Also, the chips actually driving the display tend to be an awful lot faster at doing their job than the Amiga's internal circuitry.



The Cybervision 64/3D features the Virge 3D rendering chip.



The PicassoIV is huge, but it does offer built-in flicker fixing.

EGS

EGS was an early standard for Amiga graphics cards that was designed primarily to make it easy for software developers to support this type of hardware. If everyone had come up with their own way of handling graphics cards, the result would have been mayhem (rather like in the PC market), with some cards being supported by particular applications and some not.

The GVP Spectrum and the Rainbow were popular cards which used the EGS system, as did many others at the time. There wasn't anything badly wrong with EGS, but it was slow and cumbersome. However, unlike previous systems, the EGS devices properly patched the operating system's display database so you could choose EGS screens for any application which allowed you to select a screenmode. Many applications refused to work properly with EGS, though this was at least in part due to poor programming.

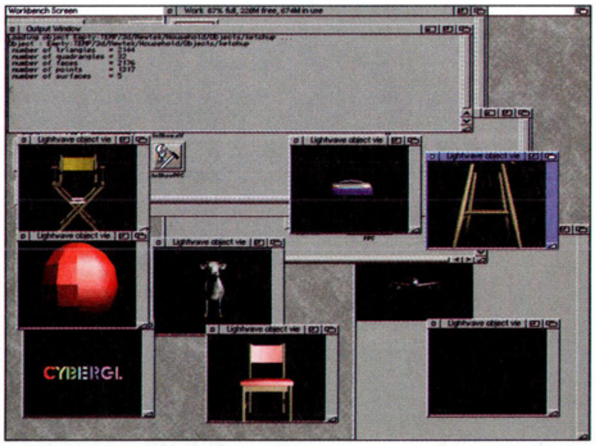
P96/CGFX

The two most successful graphics cards of modern times are the Cybervision64 (and later the CV64/3D) from phase 5 and the Picasso from VillageTronic. It isn't surprising that both manufacturers developed their own driver software, in the form of *CyberGraphX* and *Picasso96*.

The modern software properly adds screenmodes to the display database and also allows the user to define new screenmodes to match the exact display device you are using. This is by far and away the most complicated area of setting up a modern graphics card.

You will need to have the handbook for your monitor open at the relevant specifications page because trying to drive the monitor at the wrong speed could damage it.

The speed of the display (and the speed of the card) determine its actual



The Virge on the Cybervision 64/3D in action.



If you want to do proper graphics work, a true-colour display is essential.

useable screen area. A 1024x768 screen won't run on a 1084s monitor, simply because the monitor can't handle the refresh speeds that are necessary for that size of display. This means you have to take into account the monitor you are going to be using when considering a graphics card.

As a rule, graphics cards can be programmed to support higher frequency displays, and so use the less expensive SVGA/VGA monitors. You don't need to get a specific monitor to display Amiga low res frequencies too, unless you want to play old games.

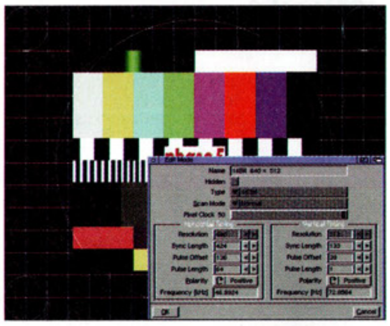
Bizarrely, the Cybervision card from phase 5 has an optional plug on-board to provide scandoubling of the native signal (avoiding the problem of low res displays) and to switch between native and graphics card modes on the same monitor. These functions are usually built into the card in the first place.

OPENGL

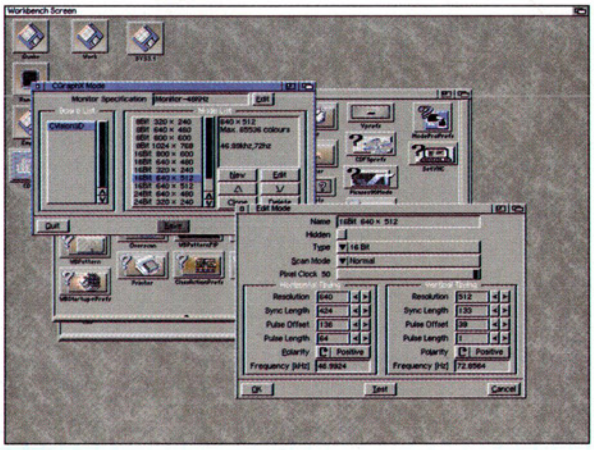
After developing standard graphics cards capable of moving large amounts of data around 24-bit screens with ease, the technology industry started designing display chips that could handle 3D graphics.

These chips use their own processor for on-board texture and light mapping, 3D rotation and so on. As it is a custom chip and has no overhead on the native processor, such display chips can generate much faster, smoother and more realistic displays.

In order to establish some sort of common ground amongst these chips, a standard known as OpenGL was developed. Chips supporting this standard could then be addressed by generic software, which didn't really care what exact make or speed of card it was dealing with. OpenGL had varied success but is quite widely supported in professional applications, such as rendering software. Indeed, all the other versions of *Lighwave*, bar the Amiga one, support OpenGL.



***CyberGraphX* and *P96* both come with custom monitor setup utilities.**



Define graphics modes to suit your particular monitor.

For some reason, manufacturers of Amiga graphics cards have been slow to include 3D processing chips. This is presumably because nobody has written any software that can use them. However, the Cybervision 64/3D does currently boast such a chip, the Virge 3D processor, but as you might have guessed, there isn't a lot of software to support it.

Newtek could easily support it with *Lightwave*, but they seem rather reticent to release any more Amiga versions of this seminal package.

Phase 5 themselves have produced a *Lightwave* object viewer which utilises the Virge, and their MPEG player, *Isis*, uses another Virge function, the overlay mode, to produce scalable output that doesn't affect playing speed (i.e. a large window plays back at the same speed as a small one).

As far as third party commercial support goes, the Virge is currently only supported by *Tornado 3D*, which makes use of the faster renders to produce an almost real-time shaded perspective preview. It is countless times faster than waiting for the main CPU to render the image, even on a PPC Amiga.

VillageTronic also plan to introduce a 3D processor add-on for their successful Picasso graphics cards. There aren't yet any details on software that will actively support it.

FUTURE PLANS

The next big graphics card we will see released is the CybervisionPPC. This is potentially of most interest to A1200 owners who, without the benefit of Zorro slots, have never been able to attach a graphics card before. The CybervisionPPC will attach to the special slot on the Cyberstorm and Blizzard PPC cards and promises greater speed than the current phase 5 cards.

The real future for graphics devices may be decided by the course of development of the next Amiga. Having a PCI-based Amiga box would enable manufacturers to easily create graphics cards for the Amiga, Mac and PC markets. The actual hardware would be more or less identical and the savings this is likely to make for manufacturers is considerable.

Both of the current Amiga graphics card manufacturers already produce graphics cards for the Macintosh platform. However, such devices will remain on the drawing board until a true PCI Amiga is released.

That brings us to the end of our look at graphics. We hope you have found it informative and useful. If you have any further questions about graphics on the Amiga, please write to our Workbench section at the usual address: Workbench, *Amiga Format*, 30 Monmouth Street, Bath, BA1 2BW. Alternatively, you can email your questions to amformat@futurenet.co.uk, remembering to put Workbench in the subject line.

C for Yourself

Waiter? I appear to have an Amiga in my soup. **John Kennedy** checks the menu in the continuing guide to programming with C.

Contents

Missed a tutorial in this series? Call our back issue hotline on 01458 271102.

Menus are a key part of the Amiga user interface. Every program has them and there is a recognised standard for the way in which they are laid out. This makes it a lot easier to use programs because you can be sure of things like being able to save and load data by using the Project menu. Menus are used for commands, such as save or print, and also to select options, such as fast, medium and slow.

Menus are also one of those features which look as through they could be a nightmare to program. When a menu pops down, what happens to the area of the screen underneath? Who has to redraw it? What about handling menus which have submenus? What about creating shortcut keys? What about the little tick which appears when a menu option is active? What actually happens when a menu is selected?

AMIGA OS MAGIC

As you might have come to expect by now, the wonderful Amiga operating system looks after most of these points. You don't have to worry about storing and redrawing the contents of the screen for a start. Like moving a window around the screen, that's one problem the OS deals with.

In the same way that clicking the mouse button sends an IDCMP message to your program, selecting a menu option sends another message. The exact message depends on the menu option selected, and so by decoding the message your program knows what to do. This is another facet of the Amiga's "wait for something to happen" multitasking approach.

Your program can effectively go to sleep and let the CPU worry about other tasks, until the user selects a menu option from your program.

DESIGNING A MENU

I hope no-one is still struggling with a Workbench version less than two, so we can safely assume that we have access to the GadTools library. This simplifies the creation of menus by adding about six useful function calls. The key, as always, is knowing how to set up the data structure to pass to these functions.

LISTING 1

```
struct IntuiText menutext[] =                    // The menu text
{
        {0,1,JAM2,0,1,NULL,"Open",NULL},
        {0,1,JAM2,0,1,NULL,"Close",NULL},
        {0,1,JAM2,0,1,NULL,"Exit",NULL},
};
```

Every menu item must first be defined as an item of text.

We effectively build up the menu structures in reverse, starting with any submenus and working up to the topmost level. However, let's start with something slightly more simple and add a single menu with three options to our standard window program.

The first step is to define the text strings that will be displayed in the menu – yes, we do need to go down to quite a basic level. These text strings must be part of a standard Amiga text format, which can include information on the font as well as colour and drawing modes. It looks like overkill, but it's part of the standard ultra-flexible way of using the Amiga.

LISTING 2

```
struct MenuItem menu1[] =                         // The menu items
{
        { // Open option
        &menu1[1],0,0, MENWIDTH, MENHEIGHT,
        ITEMTEXT|MENUTOGGLE|ITEMENABLED|HIGHCOMP,
        0, (APTR) &menutext[0],NULL,NULL,NULL,NULL
        },
        { // Close option
        &menu1[2],0,MENHEIGHT, MENWIDTH, MENHEIGHT,
        ITEMTEXT|MENUTOGGLE|ITEMENABLED|HIGHCOMP,
        0, (APTR) &menutext[1],NULL,NULL,NULL,NULL
        },
        { // Exit option
        NULL,0,MENHEIGHT*2, MENWIDTH, MENHEIGHT,
        ITEMTEXT|MENUTOGGLE|ITEMENABLED|HIGHCOMP,
        0, (APTR) &menutext[2],NULL,NULL,NULL,NULL
        },
};


struct Menu menustrip[1] =              // The menu bar
{
        {
                NULL,
                2,0,
                64, MENHEIGHT,
                MENUENABLED,
                "Project",      <----- Menu name
                &menu1[0],
        },
};
```

Link to next menu

The menu has two structures: one for each item, and one for the overall menu strip at the top of the screen

DEFINING THE STRUCTURE

Listing 1 contains the structure of text strings. We can then move on to defining the structure which describes the menu itself. As you would expect, it points to the relevant text string, but also includes a lot of special options (the uppercase words) which tell the OS about the menu option.

For example, the OS has to know if the menu option is text or graphics. It also needs to know how large the menu is, if the particular option is currently active and so on. We use some constants to make it easier to alter the size of the menu later on, if need be.

The first element in each menu is a link to the next menu in the list. This chaining process is a very common technique in Intuition and always reaches an end with NULL. Finally, we need to define the menu strip itself and assign an overall name to the menu. All these settings are defined in Listing 2.

INTEGRATION

Once we have the structures defined, we can start to integrate them into our familiar program. There are several stages to this. We have to include a special flag in the window definition to make sure it will pass IDCMP messages when a menu item is selected. We also have to link the menu with the current window, and this is done using the function SetMenuStrip().

Once the program ends, there is a matching ClearMenuStrip() function which disconnects the menu from the

LISTING 3

The final listing includes C to decode the IDCMP message and discover which menu has been selected.

```
#include <stdio.h>
#include <exec/types.h>
#include <intuition/intuition.h>
#include <intuition/intuitionbase.h>

#include <graphics/gfxmacros.h>
#include <graphics/gfxbase.h>

#include <clib/exec protos.h>
#include <clib/dos_protos.h>
#include <clib/intuition protos.h>

struct Library *IntuitionBase;
struct GfxBase *gfxbase;           // Open the graphics library!


#define MENWIDTH 64                     // Some constants
#define MENHEIGHT 10



struct IntuiText menutext[] =           // The menu text
{
      {0,1,JAM2,0,1,NULL,"Open",NULL},
      {0,1,JAM2,0,1,NULL,"Close",NULL},
      {0,1,JAM2,0,1,NULL,"Exit",NULL},
};


struct MenuItem menu1[] =               // The menu items
{
      { // Open option
      &menu1[1],0,0, MENWIDTH, MENHEIGHT,
      ITEMTEXT|MENUTOGGLE|ITEMENABLED|HIGHCOMP,
      0, (APTR)&menutext[0],NULL,NULL,NULL,NULL
      },
      { // Close option
      &menu1[2],0,MENHEIGHT, MENWIDTH, MENHEIGHT,
      ITEMTEXT|MENUTOGGLE|ITEMENABLED|HIGHCOMP,
      0, (APTR)&menutext[1],NULL,NULL,NULL,NULL
      },
      { // Exit option
      NULL,0,MENHEIGHT*2, MENWIDTH, MENHEIGHT,
      ITEMTEXT|MENUTOGGLE|ITEMENABLED|HIGHCOMP,
      0, (APTR)&menutext[2],NULL,NULL,NULL,NULL
      },
};


struct Menu menustrip[1] =         // The menu bar
{
      {
            NULL,
            2,0,
            64, MENHEIGHT,
            MENUENABLED,
            "Project",
            &menu1[0],
      },
};

struct TagItem win_tags[] = {            // The window
      {WA Left,         20},
      {WA_Top,          20},
      {WA_Width,        300},
      {WA Height,       250},
      {WA_CloseGadget, TRUE},
      {WA Activate,      TRUE},
      {WA_IDCMP,        IDCMP_MENUPICK|IDCMP_CLOSEWINDOW},
      //{WA Flags,            WFLG DRAGBAR},
      {TAG_DONE,        NULL},
};

void main()
{

      struct IntuiMessage *msg;
      struct Window *win;
      int flag = TRUE;
      UWORD menunumber;
      UWORD which_menu;
      UWORD which item;

      IntuitionBase = OpenLibrary("intuition.library",37);

      if (IntuitionBase!=NULL)
      {

            gfxbase=(struct GfxBase *)OpenLibrary("graphics.library",33L);

            if (gfxbase!=NULL)

            {

                  win=OpenWindowTagList(NULL,win_tags);
                  if (win!=NULL)
                  {

                        SetMenuStrip(win, menustrip);

                        while (flag)
                              {

                              WaitPort(win->UserPort);
                              // Wait around for message

                              while (msg = (struct IntuiMessage *)GetMsg(win->UserPort))
                                    {

                                    switch (msg->Class)
                                    {
                                          case IDCMP_CLOSEWINDOW:
                                                flag=FALSE;
                                                break;

                                          case IDCMP_MENUPICK:
                                                menunumber=msg->Code;
                                                which_item=ITEMNUM(menunumber);
                                                which_menu=MENUNUM(menunumber);
                                                printf("Menu number:%d\n",which menu);
                                                printf("Menu item:%d\n",which_item);

                                                if ((which_menu==0) && (which_item==2))
                                                      flag=FALSE;
                                                break;

                                    }

                                    ReplyMsg((struct Message *)msg);

                                    }
                              }

                        ClearMenuStrip(win);

                        CloseWindow(win);
                  }

                  CloseLibrary((struct Library *)gfxbase);
            }
      CloseLibrary((struct Library *)IntuitionBase);
      }
}
```

window. Don't leave it out, unless you want your program to crash or refuse to release memory.

DECODING THE MENU

Now we can turn our attention to working out which menu option has been selected by the user. As in previous programs, this revolves around the IDCMP message which has arrived at our program from the operating system. By waiting for an IDCMP_MENUPICK message and then looking at the MenuNumber and ItemNumber value associated with it, we can eventually get a numeric value that indicates the menu option which has been selected.

This can look a lot like a magic spell at this stage, but remember that part of the complexity is due to the Amiga being so flexible. The operating system needs to be able to detect every menu item on an individual basis, even those nested in other menus. Even though our program only has one menu, the method remains the same.

You can see this in action in our final listing, Listing 3. This is the final program, which incorporate the menu and window definitions, as well as the code for handing the menu options.

The menu options won't actually do anything (apart from the last one) but you should be able to see where you can insert the code which is executed when the option is selected. It's more common to place calls to your own functions at these locations.

CHANGING THE MENU

It's possible, although not always a good idea, to make changes to the menu after the program has begun. For example, you may want to add a new submenu or change some options, depending on the current state of the program.

The danger in this is that you might confuse the poor user by constantly shifting the menus around, so think carefully before doing it.

If you do think altering the menus on the fly will make your program easier to use, you must use ClearMenuStrip() to disconnect the menu from the window. Make your changes and then use SetMenuStrip() to add them back in again. The user probably won't even notice that it's happened.

That's it for this month. We haven't had time to go into all the menu options, but we've covered enough for you to add some menus to your own programs. For more information, consult the *Amiga ROM Kernel Reference Manual* on Libraries. Another book, *The Official Amiga Style Guide*, explains how to go about designing menus which will conform to the standard appearance that all Amiga programs should use.

Next month we'll have a look at another way of getting input from the user. If you have any questions, please email me at af@sticky.net.

Please note that if you insist on asking me if I am related to a certain US president, I WILL lie to you.

Under the Bonnet



Simon Goodwin explains the brilliance of Amiga multitasking.

AFCD31:-In_the_mag-/Under_the_bonnet/

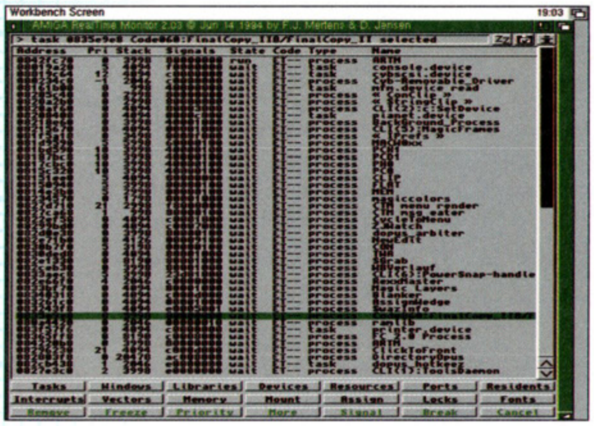
ON THIS MONTH'S CD

Contents

If you've missed chapters 1-6, call our back issue hotline on 01458 271102.

The Amiga's ability to run several programs at once, or multitask, has always been one of its strong points, but it also presents some potential traps for the unwary. This tutorial aims to explain multitasking and how to tame it.

> *If you're using two or more busy-waiting tasks, give them each the same low priority so they share residual time…*



ARTM (Amiga Real Time Monitor) **homes in on *Final Copy*.**

AMIGA SCHEDULING

The part of the Amiga's system software that determines which task is to run next is called the *Scheduler*. This keeps tasks in two lists, depending on whether they are ready to run or waiting for something to happen.

Every so often, after an adjustable time known as a 'Quantum', it interrupts the task that is currently running and looks through the list of ready tasks. The task with the highest priority is selected as the next to run.

The scheduler saves the registers of the current task on its stack, restores from the stack of the next task, then carries on. If there are several ready tasks with the same priority, they are run in turn, in a 'round-robin' fashion.

'Events' move tasks from the waiting list to the ready list. Another task may send a signal or message, a time delay might expire or hardware may generate an interrupt, indicating its need for attention.

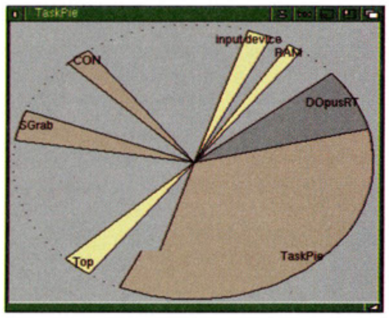
Well-behaved tasks periodically give up the processor to others by telling the operating system they're finished for the time being, so it can move them from the 'ready' list to the 'waiting' list.

REAL TASKS

The highest priority task regularly running on an Amiga is input.device, which handles user input from the mouse and keyboard. This has a high priority of 20 to make sure that inputs are not missed, and to give a prompt response. If any task runs continuously at a priority higher than that of input.device, it strangles the system, preventing further input and requiring a reset to recover.

Standard *GadTools* system gadgets are updated at once by input.device, before the corresponding message reaches the underlying task. This accounts for the snappy display updates, and for the unfortunate lag on heavily-loaded systems before the corresponding change is actually acted upon.

MUI gadgets are updated by the task, rather than the input.device, so they react more slowly. When they do change, it confirms that the underlying task has got the message.



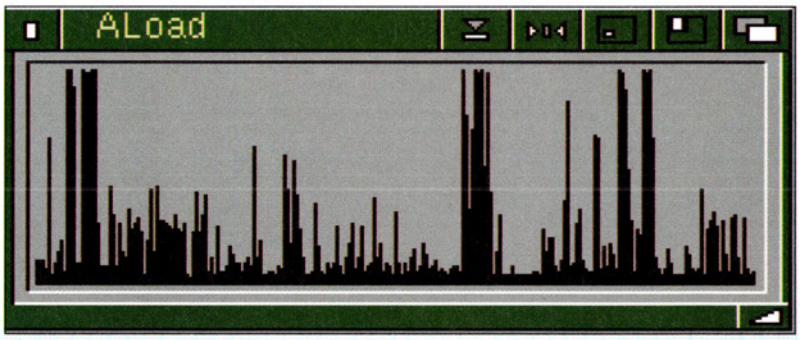
***TaskPie*'s dynamic display of *Executive* CPU allocations.**

AFCD GOODIES

ON THIS MONTH'S CD

These are some of the multitasking tools in the In_The_Mag-/Under_The_Bonnet/ drawer on your *AFCD*:

- **ARTM – *Amiga Real Time Monitor* – point and click.**
- **CHANGEPPCTASKPRI – PPC PowerUp task prioritiser.**
- **EXECUTIVE – Shareware alternate task scheduler.**
- **MULTITASKING – Task tutorial for C programmers.**
- **NICE – Launches tasks at reduced priority.**
- **QUANTUM – Adjusts the time between task swaps.**
- **STEAMYWINDOWS – Prioritises the active window.**
- **TASKPIE – Dynamically shows *Executive* CPU usage.**
- **TASKPRI – Command to set priority of any task.**
- **TASKX & TASKY – Monitors and controls tasks from WB.**
- **XOPA – Command-driven task controller.**



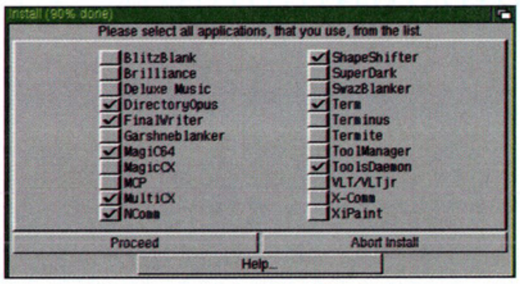
Aload **gives a dynamic real-time graph of CPU activity.**

EXECUTIVE

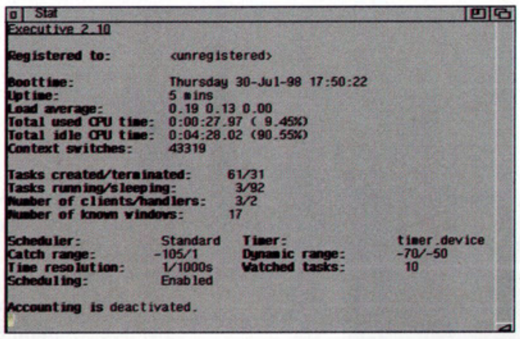
***Executive* is a replacement scheduler for Amiga tasks. It requires Kickstart 2 or later and takes advantage of *MUI* if you have it. The English installation requires 2Mb of hard disk space. An uninstaller is supplied to restore your system if you decide you don't like it, so it's safe to try *Executive*, even if you're dubious.**

It causes the Amiga to use dynamic priorities, rather like *Unix*. This reduces the risk that one greedy task will hog the entire system. It's a major system patch and it clashes with PowerUp. *Executive* requires fine tuning for each system and set of applications, so you must read the documentation (an AmigaGuide about 320K long) to make sense of it.

It has strong reporting features but its rescheduling is a mixed blessing. Many programs rely on the Amiga's default behaviour and grind to a halt if dynamically re-prioritised. Handlers and devices are not scheduled and this limits *Executive*'s effectiveness, as well as its risks. However, it's worth trying, not least for the documentation and neat interactive AmigaGuide tutorial.



***Executive* lets you warn it about 'problem' tasks.**



***Executive*'s 'Stat' command gives task statistics.**

Priorities range from -128 to 127, although real tasks cluster around the middle of this range. Applications usually run at priorities from -1 to +1, with device drivers at intermediate priorities; lower than input devices, higher than applications. This means they're promptly served when they need attention, but not at the expense of interactive control. Device control code runs at priorities of around +10, and handlers, which are less time critical, at +5 or so.

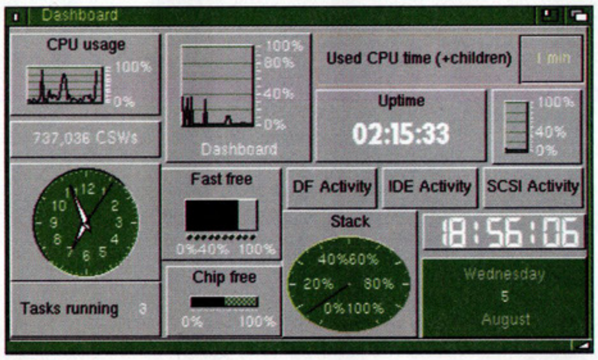
ALTERNATIVE PRIORITIES

The simplest way to fine-tune an Amiga system is to adjust the priority of the tasks you run. To do that, you must know what they are and there's no shortage of programs to tell you.

I favour *ARTM* (*Amiga Real Time Monitor*) to tweak tasks and *XOpa* to report on them. Alternatives include *TaskX*, *TaskY*, the Freeware *SIP* (*System Information Program*) and a clutch of Shell commands. Even *SysInfo* has a go, without revealing much.

XOpa is command-driven and powerful, but hardly intuitive – a tutorial in its operation would merit a series in its own right. It shows percentages of 'used' CPU time by default, so totals add up to 100% even if the processor is mostly idle. The 'usage' option tweaks things to show percentages of potential, rather than actual, time.

The list of tasks gets pretty daunting as your SYS: partition fills up. My Amiga regularly runs more than 100 simultaneous tasks, but at any given time most are idle, waiting for free time and an appropriate event to start them up.

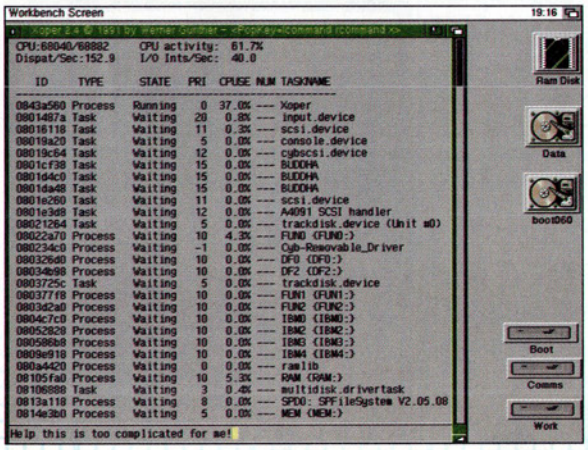


***Dashboard* snoops under the Amiga's bonnet.**

The *XOpa* screen illustrates system activity while copying files. The top lines identify the CPU; *XOpa* predates the 68060, but version 2.04 is compatible. After *XOpa* itself, FUN0: (the task for the SYS: partition) and RAM: take about five per cent of the total time used, with Commodore's dummy scsi.device ferrying messages between them.

Small slices of time go to input.device and multidisk.drivertask, checking for button presses or disk changes. This is just a fraction of the list, though. The lion's share of the time goes to *Directory Opus*, which is orchestrating the transfer.

Typically, *XOpa* itself takes the lion's share of CPU time.



AVOIDING HANGUPS

If your system goes dead slow, a task is probably locked in a loop, known as 'busy waiting'. *XOpa* shows you where the time is going. Some of these loops are inevitable, such as real-time emulation or ray-tracing, but they're bad news if you're concentrating on something else.

ARTM and *XOpa* let you 'freeze' a task, temporarily suspending it. You can go further; if a task is definitely unwanted, you might try to free up the resources it uses. This is possible but tricky. It can postpone, but rarely eliminate, a reset.

The trick is to close all the windows owned by the task, then the screen it uses (if any) *before* trying to remove the task. The risk comes because the Amiga OS operates with a closely intertwined list of lists, with no quick-release cord for each task ('resource tracking', as on *Qdos* or *Unix*) and your system crashes if you remove a link out of order.

TAMING CPU-HOGS

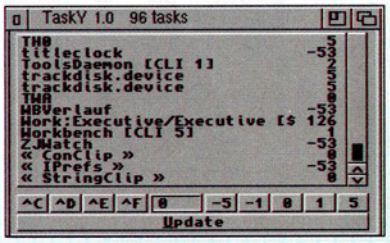
You can do similar things by shuffling task priorities, but it's risky. If you must run a task that busy-waits, like a game or an emulator, give it a priority lower than well-behaved tasks so they get the time they need, and whatever is left over goes to the greedy task.

If you're using two or more busy-waiting tasks, give them each the same low priority so they share residual time, otherwise the one with the highest priority will nobble the others.

Quantum adjusts the round-robin time-slice so competing tasks take turns more or less frequently. *Quantum 1* swaps control most often, for smoothest multi-tasking. *Quantum 8* swaps half as often as usual, reducing the switching overhead at the expense of choppier response. A bug in Workbench 1.3 means that interrupts cause re-scheduling before the full time has elapsed, so the *Quantum* is ignored.

You can temporarily freeze tasks you're not using, but *SteamyWindows* offers a neater approach, giving priority to the task associated with the current window. Beware of suspending a task that Workbench (or something else inevitable) will later call because you'll force a deadlock.

You won't always be able to avoid problems by tweaking task priorities and it's wise to save your work before embarking on radical experiments, but in the long run, familiarity with the Amiga's multi-tasking internals will give you a smoother-running system, helping you save time and avoid deadlocks.



Signal and prioritise Amiga tasks with *TaskY*.





MailBag

Send your letters to: **Letters To The Editor • Amiga Format • 30 Monmouth Street • Bath • Somerset • BA1 2BW** or email: amformat@futurenet.co.uk – putting 'Mailbag' in the subject line.

ATTENTION MR BRABY

Please can you prove to my father that the Amiga can go on the Internet and look at PC websites in the same way that it can read PC CDs? I am trying to persuade him to buy us a new Amiga.

Thomas Braby
London

Okay Thomas. Mr Braby, look at the picture. See? I can tell you from personal experience that iBrowse *on an A4000 goes much faster than* Netscape *on the office PowerMac, too.*



Naturally, the Amiga is capable of full Internet access. Looks like there'll be a brand new Amiga in the Braby household quite soon then...

SPARE US	SEND US
Complaints about review scores	Your reviews!
Requests for various bits of old software and games	Reader Ads, which is a whole section devoted to this sort of request
Emails addressed to the wrong department or not addressed at all	Ones which are properly addressed, which we might read
Letters claiming some bloke down the pub said the Amiga was dead	His name and address so we can teach him otherwise
Complaints about backward compatibility	New Amigas

OLD TIMER

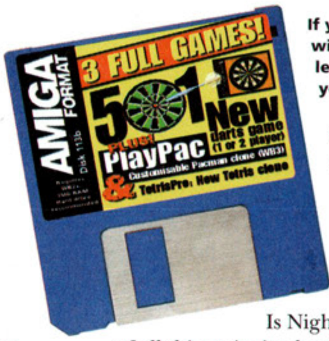
I have bought *Amiga Format* from day one. I have never written to you before, either to complain, request software or claim some bloke down the pub said the Amiga was dead.

I jumped with joy when Escom saved our bacon… NOT! I smiled smugly when Amiga Technologies made 'We love the Amiga' noises.

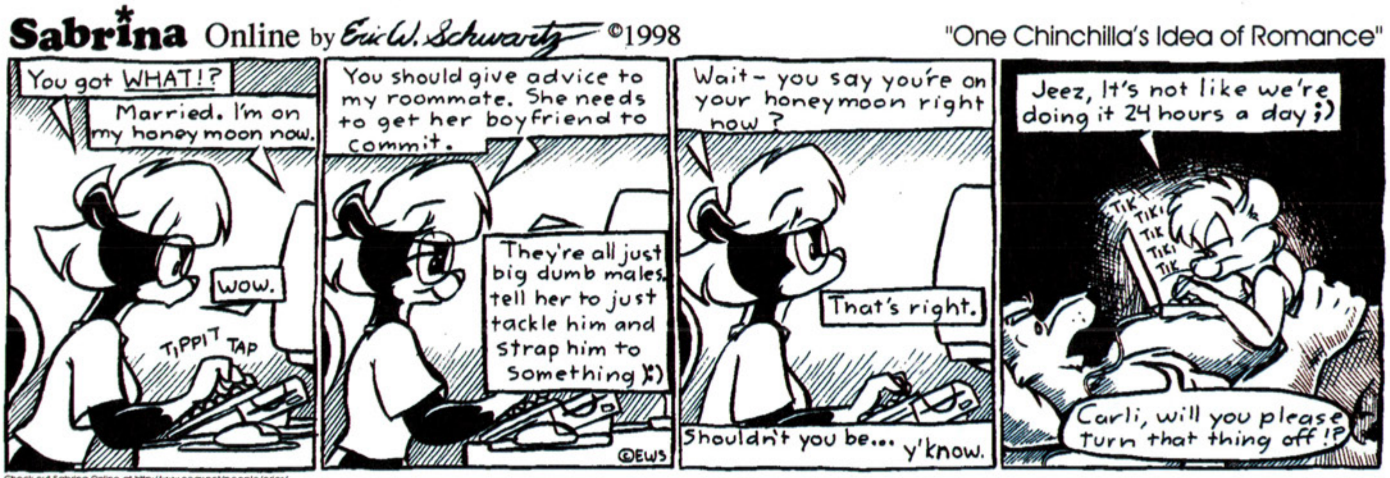
I waited and waited and I bought every issue of *Amiga Format*. I refused to believe that such a great computer could die. I only use my PC if I really have no option due to software limitations on my beloved Miggy. Now I have to admit that The End Is Nigh, when my bible of all things Amiga has run out of coverdisk programs. *501 Darts*? *Tetris*? *Pacman*? *Iconian* and a few WB hacks that you can get off the net? Is this the end? What should I do?

I come home and switch on my Miggy; no silly loading problems, no 'Close Down Your Computer' when I'm fed up. I just click on my hard-drive and away I go! Please save my sanity.

Jeff Kenyon
Liverpool



If you're not happy with the coverdisks, let us know what you want on them!



Check out Sabrina Online at http://www.coax.net/people/erics/

Reader responses:

SCHOOL'S OUT

I would like to reply to the point made in July's *AF* by Leon Brown about using Amigas in schools. I would like to point out that the video production department at my school in Cove does use Amigas for their amazing graphics capabilities, reliability and value for money.

Sadly, the department is still using A500s and A500+s, which (sorry to any A500 and A500+ users) are a bit outdated. There are a few A1200s in use but none of the computers have hard drives or CD-ROM drives fitted. An A4000 or two with PPC capabilities would be gratefully appreciated, I'm sure!

I would also like to make a point about the amount of shops stocking Amiga produce, especially hardware. I have tried looking in your ShopWatch section and even the Yellow Pages, but there just isn't anywhere near me.

Personally, I would advise Amiga Inc. to set up their own chain of shops around the UK and the world as this would make Amiga products much more accessible. Finally, do you really use A4000s at *AF*?

Mark Glanville
Farnborough

I'm glad to hear that you do still use your Amigas, but perhaps the school ought to organise a fête or something to raise some money for, at the very least, a few hard disks and a CD-ROM drive. I would think that a second hand A4000 would go down well too. Yes, we do really use them here, and very handy they are too. I don't know if any of our other readers in your area can help with the details of a local shop. There must be one nearby, surely?



A4000s – we love them, but does anyone sell them in Cove?

KETTLES AND POTS

In response to Jonathan Openshaw's letter in *AF113*, titled 'Pots and Kettles', I'd like to say a few things in my defence.

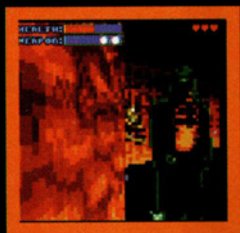
Firstly, I didn't publish *Ultimate Gloom*. I merely provided *Gloom 3*, which was supposed to go alongside *Classic Gloom* and *Gloom Deluxe* to form a collection of *Gloom* games, old and new. However, there was a major cock up and Guildhall forgot to include *Deluxe* and *Classic*. I was as disappointed as anyone when I realised what had happened. If it's any consolation, later releases of *Ultimate Gloom* came with a sticker on the back explaining what was missing.

I assure you I do try my hardest to make sure my products are the best they can be. Keep an eye out for *Zombie Massacre* if you're a fan of *Gloom* games. Thanks for buying my game. If you're on the net, why not check out my website for details of exciting new releases (http://www.welcome.to/alpha-software)?

Gareth Murfin
Alpha Software (gazy@globalnet.co.uk)

Thanks for clearing that up.





Feeling Gloomy? Try taking a visit to Gareth's website...

FREE C

In *AF112*, under the header "Room for expansion", Nick Lamburn from Braunton asked for a C Compiler that was cheap or even free, if possible. For some reason you omitted the relatively new *VBCC*. It can even generate PowerPC code and it is possible to use the PowerPC to speed up the compiling process.

Regarding the CBM include files, you will be better off buying a CD like *Geek Gadgets 2* or the *Amiga Developer's CD* and using a free compiler, rather than going for one of the commercial compilers.

Carol Meilicke
via email

Thanks for that update Carol. VBCC was included on AFCD26 if you want to try it out, Nick.

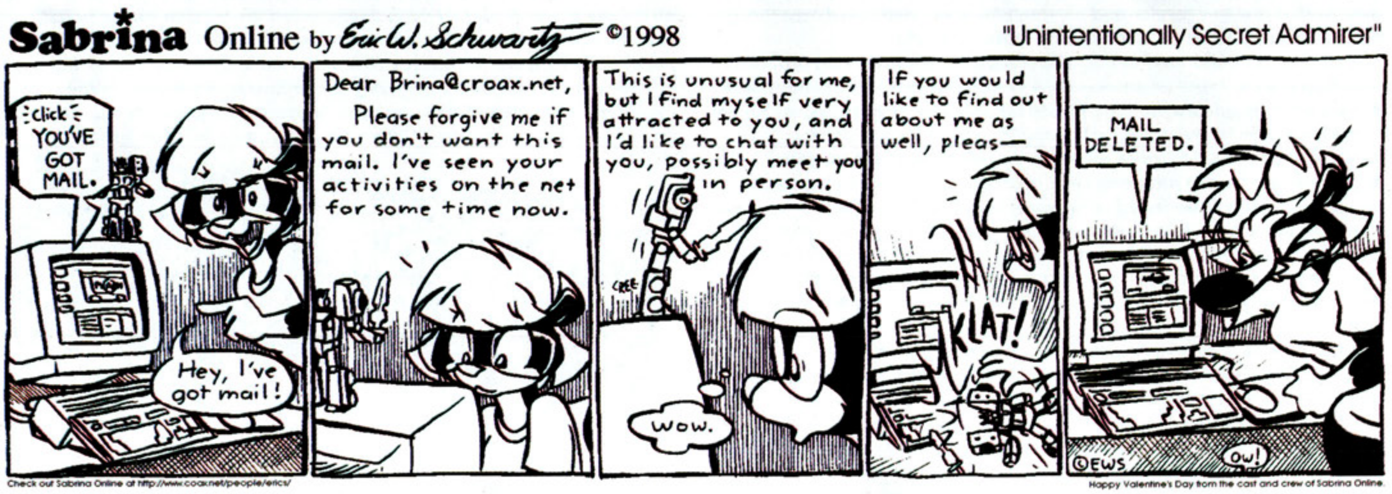
Well, we're open to suggestions. I'm sorry you weren't happy with the disk, but we always seem to upset someone. When we put full games on the disk, people complained. When we put Personal Paint *on the disks, people complained. What do you really want to see on your disks?*

CANON CAN'T

I've just bought a new Canon 4300 inkjet and use it with either *Turboprint* or *Print Studio*, and very nice it is too. This machine can also boast its own scanner. However, there isn't any software for the Amiga to run it, and what's more, I've been told by a dealer who sells them that Canon don't seem to be in the mood to create one either.

Why should we support Canon products in the future if we can only use

Continued overleaf ➡

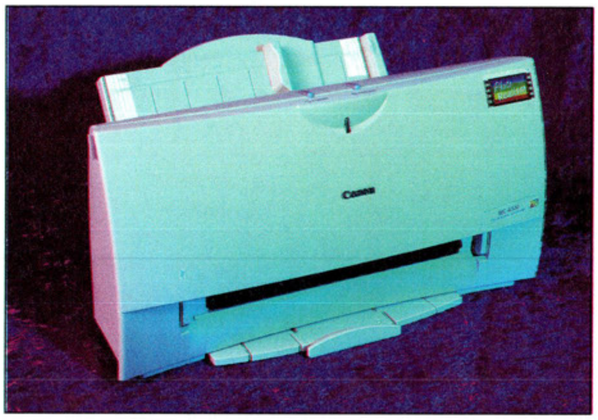


part of the machine's potential? After all, they do make a driver, so why don't they go all the way and complete the job?

What's the matter with people today? They're always starting something and never finishing it. Would it possible for you to find out if anyone, professional or amateur, is going to do anything for the 4300 scanner part?

F. Mizon
Huddersfield

I'm afraid getting Canon to do it seems rather difficult, which is odd considering their good support of the Amiga in the past. The best bet is that someone might create a Shareware driver for it. Just to get you started, AF *will pay £50 to the first person to create a working driver, which we will forward to you immediately, Mr Mizon.*



Excellent printers, but will they work on your Amiga? A reward goes to the first person to write a working driver.

AD BUSTERS

First, let me thank you for creating a really fab magazine. I have been reading it since issue 30 and now subscribe. It's great, but I really need your help. I'm doing a GCSE Graphics Product project where I have to design a promotional information pack and I thought this would be a great opportunity to show what a brilliant machine the Amiga is.

My problem is that I need information on all the old Amiga ads and lots of info on new Amigas, along with screenshots and specifications. It would be great if you at *AF*, or anyone who reads the magazine, could help me by sending me any old mags with Amiga ads in them and pictures and screenshots of new Amigas on disk or CD. Please help, I'm only 15 and don't have a lot of resources.

When I have completed my project I will send you a copy of the final product, which I hope will be great.

Finally, on a different topic, I think the new Amigas that I am hearing about are all great. The developer machine

I'LL HAVE ANOTHER

Was Nick Veitch drunk when he said it was OK to print the latest *AF* (*112*)? You charge a pound more than *PC Format*, you have around 60 less pages (excluding adverts), the paper that you print on is almost as crummy as the stuff in the back of *CU Amiga* and to top it off you tell us that you could fill many more pages if you had the space.

Now, with this in mind, could you please tell me why in the hell you waste five whole pages telling us how to program a PIC!? I would bet my Amiga (and I love it very much) that less than two per cent of your readers will do the project, and I'm sure that this is not the only letter of this kind you've received. [It is actually – Ed.] Those five pages could have been used to expand your Java feature which was packed onto two sides.

Also, you should advertise your reader calls day a bit more. I only saw it while I was looking for your email address.

Finally, I know why *AF* doesn't put music mods on the cover CD, but why doesn't this stop other PC mags from doing it? They're full of copyrighted sound samples.

Matthew O'Neill

Matthew, you raise a number of points, some of which are even worth responding to. If you don't want to buy AF, fine, don't buy it. I still think it represents good value and maintains a high standard of writing and reviewing not matched by many other magazines. PC mags can be cheaper because a lot more of them are printed and sold, it's as simple as that.

As for what we choose to fill our pages, we know that not everyone will be interested in PIC programming. Some people have been though. I'm sorry you weren't, but it's the nature of magazines that there are going to be some things you aren't particularly interested in. The PIC feature needed five pages to explain it and to print the diagrams large enough to be useful. I pay my TV licence and I reckon I probably only watch or record about two or three things that actually interest me each day, but do you hear me complaining?

The reason we don't promote our calls line is because it is already overused. It is a free service and we don't have ten dedicated experts answering the phone – it is merely the editorial staff.

The line was intended to help out readers who had serious problems that they couldn't find an answer to. A typical day consists of about 30% of calls from people asking for a phone number (for advertisers, which are in the magazine anyway), 30% of people having difficulty getting something on the CD to work (because they don't read the magazine), 15% of people having problems with software or hardware they have bought and haven't bothered to either a) read the instructions or b) speak to the people who sold it to them and 15 % of people asking frankly ridiculous questions which we aren't going to know the answer to (like, "How much will the next Amiga cost exactly?", "What are the Dip switch settings for a Lexmark 3520", "How will the financial situation in Japan affect the future of the Amiga?").

The final 10% of people actually have valid problems. Unfortunately, many of the people with real problems never get through because the other idiots are clogging up the phone line.

As for other magazines breaking the law, that's a matter for their conscience and their legal council. Several magazines have already had to pay out huge sums of damages for just this reason.

PIC ON SOMEONE ELSE

A while ago I bought a commercially available PC to Amiga keyboard interface which was based on a PIC chip. I never could get it to work and I've still got £45 worth of PC keyboards. It's handy that you have this PIC programming series as I may be able to make my own keyboard interface.

I've seen the A1200 circuit and source but I'm waiting for the exact connection details for an A500+. I've built the Maplin project, although items like a zif (zero insertion socket), plastic chip extractor and prototype plugboard are more or less essential. I verified the hardware (once I'd set env ppdebug 1) and *AmigaPP* wrote the hex to chip correctly.

I could not get *Picax* to compile Listing 1 but *Picasm* did, although its hex file output put strange control characters at line ends. Once removed, *AmigaPP* wrote it with no problems. *Picasm* did not like the line "msb equ 8". It seems to count from 0. Change it to "msb equ 7" and it's OK.

A possible use as a robot brain would be to read or sample the output from a digital camera slung underneath its chassis. If the picture data is unchanged after several samples, the forward or backward motion is obstructed. I don't know what input reading is possible with this chip. Perhaps you could show some examples? Your article on Java was good, but not in enough depth. The Kaffe package is (apparently) usable, but all I get from compiled code is "trap error no. 3" and it's hard to see how to correct this with the documents included.

R. Mclaren
London

I'm glad you've got the programmer working – you're half way there! I'll have an answer for you on the A500+ connections next month, as we seem to have "misplaced" our A500 service manual at the moment.

There are a number of uses. A robot would certainly be one of them. The PIC, at least the 16C84, could not easily interpret the analogue signal from the camera directly, but you could couple it with an ADC to perform that task. A robot is one of the projects we have been looking at, so look out for it in future issues. Unfortunately, we couldn't get Kaffe to work at all on any of our Amigas. I even downloaded the version someone had compiled and posted on the Internet, but to no avail. I understand some people have it working, but it's difficult to say why it won't work here.

We will, of course, be following up on Java in the future. In the meantime, if anyone else reading this happens to know if the connections would be the same for the 8520 on the A500+, please let us know.



Take your PIC: let us know if you want to see more PIC programming in *AF*.

BUGS

I'm thinking about buying the excellent *SWOS*. There is one thing that puts me off, though: hand ache. My joystick was never designed for hours of football playing. There is, however, a joystick that was: the Bug. Does anybody still sell this? I can't find one. Do I resign myself to endless hand ache or can you help me?

Mark Weldon
Wigston

They are indeed the required joystick for that particular activity. Unfortunately, they are no longer manufactured. All of the AF *ones are, as I'm sure you can imagine, irreparably broken now, although Simon Goodwin did pick one up at a car boot sale for me. Your best bet is probably the Reader Ads section of the mag, or your local paper.*



SWOS – definitely one of the easiest and most enjoyable ways to destroy all your joysticks...

sounds perfect for my family as it will have PC and Windoze compatibility, which my parents must have (damn them!) and an Amiga which will use the PC as a slave machine. This is without mentioning the high resolution graphics and all those other things that come cheaply on the PC.

However, this doesn't mean I won't buy the new super Amiga. I just plan to get the developer machine as a temporary solution to make everyone at home happy. Viva the Amiga!

Davinder Kundi, 5 Mansell Road,
Greenford, Middlesex, UB6 9EP.
☎ 0181 5755147

PREMIER ZZZZZZ

As a long time subscriber to *Amiga Format*, I would like to thank Gremlin (the publishers of the *Premier Manager* series) for NOT releasing *Premier Manager 98* on the Amiga. Am I mad? Thousands of Amiga owners are crying out for *PM 98* to appear on the Amiga. If it ever does appear (a snowball in Hell's chance) it needs to be a lot better than the PlayStation version. 90% of the *Premier Manager 3* options are missing: no conference league, no option to change clubs, no option to develop your ground, no loan players, no assistant manager... the list goes on.

All you have is a run of the mill, boring game with 3D match highlights. All the fun has been stripped out of the game to make way for repetitive highlights and match commentary from Barry Davies.

Thank God I've got *Premier Manager 3* on my Amiga. It may be a bit long in the tooth now but it sure beats the PlayStation version. Let's hope that the future 'super' Amigas appear soon so decent games start to re-appear on them, not some cut down dross.

R. Richards
Nottingham

I've seen the PSX version too. Hmmm. It wasn't very exciting. I had more fun with the old, classic Football Manager.

There weren't that many advertisements for new Amigas in the pages of older Amiga magazines as Commodore preferred billboard and newspaper advertising. I'm sure some of our readers will be able to help you, though.

As for the specs of the new Amiga, they were revealed more fully last month, so I hope you got that issue!

I'm sure there will be many people who join you in opting for a "November Box" as a stopgap until some new hardware arrives.

VIDEO NATION

My main hobby is video. I came to the conclusion a couple of years ago that a computer would be cheaper and more versatile for adding titles than a dedicated title generator. When it came to selecting the computer for the job, I was totally computer illiterate.

A great deal of research led me to the conclusion that the A1200 suited my needs and I duly bought a fairly new second hand one.

Since buying it, I've added a printer (useful for cassette labels and box sleeves), a frame grabber, a genlock, more memory and a hard drive (how did we ever manage without them?). I hope to add a CD-ROM drive soon.

As well as a title generator, I now have an image manipulator, a word processor, an accountant, a calculator, a diary (sorry, scheduler), a road map (Route UK), a log of all my videos and other essentials, a lottery checker, an address/phone book and a great games machine. I also have the ability to produce animations (other than titles) to keep the grandchildren amused, all for about the same cost as a decent dedicated title generator. What great value!

I bought some ready-made animated titles, but find it much more fun making my own using *Deluxe Paint IV*. I do have your coverdisk of *Personal Paint* but I seem to fare better with *DPaint*.

One program I couldn't manage without is *AnimatED*, which really is a Godsend. If anyone uses this excellent software, don't forget to register it as it's well worth the measly ten quid.

All in all, the Amiga has given me totally professional video production at a very reasonable cost. Long may it reign!

F. J. Hudson
Derby

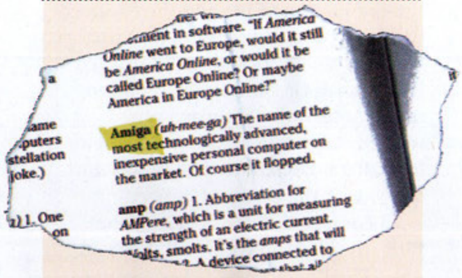
The Amiga is still difficult to top for basic titling and genlocking operations. It is capable of driving a standard composite video signal straight out of the box, which is a great headstart on any other computer platform. Thanks to its integrated video circuitry, genlocks are cheap and fairly simple add-ons.

Snippets:

Would it be possible for you to give a plug for my new diskmag called *Buzz*? I need articles, news, advice, ideas and general information about the amiga.

John Adams
JAdams1644@aol.com
17 Abbey Gardens, Belfast, BT5 7HL

No, I don't think so.


...ment in software. "If *America Online* went to Europe, would it still be *America Online*, or would it be called Europe Online? Or maybe America in Europe Online?"

Amiga (*uh-mee-ga*) The name of the most technologically advanced, inexpensive personal computer on the market. Of course it flopped.

amp (*amp*) 1. Abbreviation for *AMPere*, which is a unit for measuring the strength of an electric current. ...olts, smolts. It's the *amps* that will ... 2. A device connected to ...

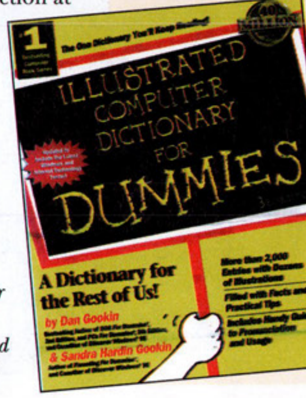
I've included a copy of this text because it really annoyed me. OK, maybe I'm a bit fanatical, but I hate to see a good computer die, especially one that I think handles better, or should I say smoother, than the others. It's a computer I'm used to and I must say it's obvious that with stuff like this dictionary out there, people aren't taking the Amiga seriously.

I guess in some ways I can't blame them. How could I take a computer seriously if I'd never heard of or used it? Why would I want to use the Amiga after reading stuff like this dictionary? It just makes me question the Amiga's future and makes me wonder how they intend to make themselves not only known to people but taken seriously as well.

I still have faith in it because I know if it's marketed well and new technology is put into it to make it up to speed then anything is possible. I have seen stupid stuff marketed so well that it sold to the point of brainwashing. Go figure... Oh yeah, Bath is beautiful!

Roy Rudder
Dorchester, USA

I think the Amiga has enjoyed a bit of a media revival recently, with news stories popping up in PC magazines and national newspapers too. Although a lot of people persist in believing the Amiga is no more, I think we can expect to see a lot more attention when the November Boxes appear.



Poor press for the Amiga in this dictionary, but it's getting better all the time...

TOWER OF TRIUMPHS

In response to your request for stories of towered up Amigas, here goes. I decided to move my A1200 into a tower last October. I chose the Eyetech tower, simply because it seemed the easiest solution. I also purchased a keyboard adaptor, a 4-way buffered device and a 4.3Gb hard drive from them. After following the sometimes ambiguous instructions, I got the whole thing assembled and ready to power up.

Alas, it was not to be. The keyboard showed no sign of life and the 8x speed CD drive constantly gave read/write errors or totally locked up. I returned the items to Gasteiner, who replaced them. At least the keyboard now worked. After much testing, it came to light that my Blizzard 1230-IV was not happy with the buffered device.

I contacted the suppliers of the Blizzard (Harwoods) but all they said was, "The Blizzard was never meant to work with IDE devices."

Eventually it emerged that certain revisions of motherboards were having problems with IDE devices when accelerated. I duly contacted Eyetech and dispatched my motherboard.

Then, shock horror, the engineers at Eyetech told me that my board revision was a late AT one and that the timing problems had already been rectified, although if I returned the buffered device, cabling, etc, they would check those. It transpired that the problem was with the 4-way buffered device which for a small fee they replaced with an upgraded version.

At last, everything works in perfect harmony. My Amiga looks great and I'm a happy chappy. Just a word of warning to all those intending to upgrade to a tower: be sure your system is fully compatible and if it doesn't work straight away, stick at it. And don't forget the sweatshirt you promised!

I. A. Hewitt
Scunthorpe

Well, some people manage to get everything to work straight away, you know. I'm glad that you've finally got everything working, and don't worry, your sweatshirt should be on it's way to you right now.

IN HIDING

I live in Hyde on the East side of Manchester. There are no shops supporting the Amiga for several miles around, the nearest being in the middle of Manchester. Stewart Electronics in Ashton recently featured in your ShopWatch page, but this shop only stocks a few old games and some PD disks.

They say they can no longer afford to employ a technician as they mainly deal in consoles which are just thrown away and replaced when they go wrong. While there are some shops stocking games, such as Electronics Boutique, there is nowhere supporting the serious side of the Amiga.

Recently, my friend and I got an offer from the owner of a PC repair and upgrade shop, Vortex Services, which is a short distance from Stewart Electronics in Ashton. He said that if we thought it would bring money in then we could take on Amiga repairs and upgrades through the shop.

We have upgraded our own computers and those belonging to our friends several times so we have picked up a working knowledge of Amigas. We therefore decided to try to see if we could bring some business in. We've had some leaflets printed and several people have taken them, but we have not yet had any actual responses.

I am writing to you because we want to do something to help the Amiga in this area. This opportunity is unique and none of the other shops in this area would have made the same offer.

I know that if the owner of this shop saw a lot of Amiga repairs coming into the shop, he would start to stock hardware and software as well. I would appreciate it if you could include this shop on your ShopWatch page as this may bring some business in and persuade the owner to think seriously about Amigas.

I'm a student so I can't afford any decent advertising, but I'd like to point out that I'm not in this for the money – I'm just trying to raise the profile of the Amiga around here and to give it a bit of support.

Paul Williams, Hyde
Vortex Services
13-15 St. Michael's Square
Ashton Under Lyne
Lance
OL6 6LF

Excellent, we'll feature you in ShopWatch next month. I'm sure that if there are so few places offering proper Amiga support in the area you will soon pick up a bit of custom. Perhaps Amiga owners in the area should call in anyway, even if their equipment isn't broken.

SHIVER AND QUAKE

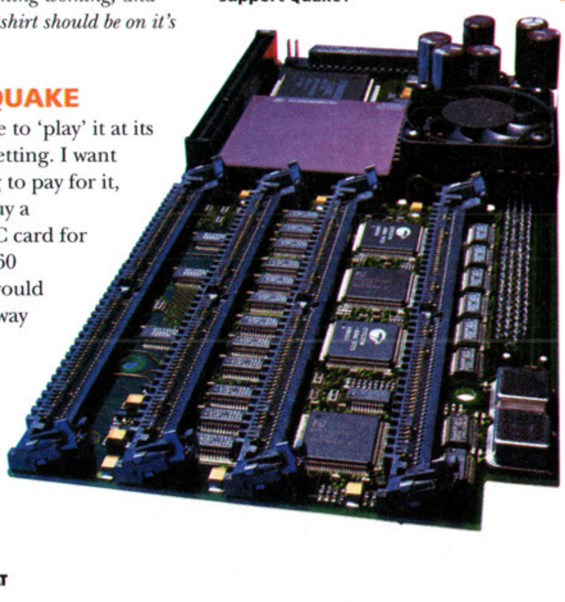
I own *Quake* and have to 'play' it at its absolute minimum setting. I want more and I'm willing to pay for it, so I have a choice: buy a 160MHz '040/25 PPC card for £250 or an Apollo '060 50MHz for £270. It would seem the PPC is the way to go, but:

1 I have just read that *Quake PPC* is not likely to happen because not enough people own PPC.

Has everyone forgotten that PC owners upgraded to play *Doom* and *Quake* as the machines weren't already there? People like myself are waiting for *Quake PPC* before shelling out on the hardware. Your survey shows the proliferance of the '030 owner and there must be a few like me who want to upgrade to PPC and are just waiting for the software.

2 Have phase 5 released sales figures of PPC cards? Public announcements on sales may give more credibility to PPC software development and this would encourage others to PowerUp. I bet 99% of PPC owners would buy *Quake*.

3 If I bought the '060, what sort of screen size and speed would *Quake* run comfortably at? I assume you've looked at the illegal PPC port. How does it compare on a 160MHz PPC to '060 *Quake*?



How does the PPC card fit into the future of the Amiga and will it ever support *Quake*?

4 What is the developer feeling towards PPC now that AmigaNG has been announced? How about running an *AF* feature on this?

5 Have phase 5 considered subsidising *Quake PPC* with, say, a profit share after so many are sold?

What with the chicken and the egg affair that's currently happening with software developers, it may be their only way to recuperate PPC R&D costs. Even if AmigaNG arrives on time (haha!) that still gives 18 months before we can buy the hardware, and then there'll be the same problem that every Amiga suffers – a wait of at least a year for the software.

That's plenty of time for PPC to establish itself, with quality games from ClickBOOM, World Foundry and Alive. If everyone waits for AmigaNG, I doubt *AF* will still be in print.

Jonathan Day
Thirsk

1 It is a chicken and egg situation, as we have said before. Software developers aren't going to spend time and effort developing applications if they can only sell a few units of them.

2 Sales of PPC cards number in the low thousands. Even if every one of them bought a copy of Quake PPC *at full price, it isn't a substantial amount of money.*

Obviously, we can't answer for Clickboom because we don't know the dynamics of their business, the margins they trade on and so on, but it certainly doesn't look like a surefire money-spinner. Especially, you have to say, when nefarious crackers have already released a Quake PPC *player, as you yourself mention.*

3 It depends on so many things, like how much memory you have, whether you have a graphics card, etc. On the office '060 machine with a graphics card, it ran at a playable speed on a full screen.

4 Well, both phase 5 and Haage and Partner have committed themselves to continuing development on the PPC, with the possibility of releasing a new version of Workbench for it in the future.

5 I don't think phase 5 have considered such drastic action, considering they are hardly rolling in it themselves. However, that really is a matter for the companies themselves to address.

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Commodore MPS 1270 inkjet printer, black and white, includes user guide and printer cable. OK for Amiga and PC, £30, buyer collects or pays postage. Sale due to upgrade. ☎ 01282 698012.

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3D object of Alien (from Aliens). Prefer Imagine/Lightwave but any would do. Send contact name, address, email, fax, phone or pager number to Colin. Pager: ☎ 04325 145792. Thanks.

Large memory accelerator for A1200. Will swap AlphaPower controller with 8Mb fitted and 175Mb hard drive (A500-A500+). Plugs straight in. ☎ Gary 01273 415907. 9am-4pm weekdays only. Leave message if no-one home.

Amiga Format coverdisk 55a (Disk Master 2). Please send to Mick Galvin, 84 St. Cuthbert's Crescent, Albrighton, Nr. Wolverhampton, WV7 3HW.

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Manuals for A2000. Can anyone help? 01302 820134.

Looking for '040 or cheap '060 accelerator with or without RAM for my A1200. Blizzard or Apollo preferred. ☎ Alex 01582 391918 (after 6pm).

Wanted to complete collection: Amiga World issues 6, 64-66, 68 and over. Also PCMCIA memory and 68030 for A600. Write to Philippe Dumont, rue Lombry 7, 4920 Nonceveux, Aywaille, Belgium. Penpals welcome!

Monkey Island 1 and 2, floppy, for A1200, complete with manual. Official book for Cannon Fodder wanted. Send list and prices to John Levett, 40 Rue Grates, B-1170, Brussels, Belgium.

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FMV unit for CD32. Will pay £50, must be in good condition. Also, CD32 games wanted, for cash or swap. Email scastle@globalnet.co.uk or write to J. Castle, The Penthouse, 8 Runnacleave Road, Ilfracombe, N. Devon, EX34 8AR.

PERSONAL

Also see the AmigaAngels document on our CD.

Amiga contacts needed in/around Sheffield. I need help putting CD-ROM and 5.25" HD into Eyetech tower. Or, exchange 1.2Gb Bigfoot HD for 500Mb and 2.5" HD (internal A1200). Email fagin@firstcontact.u-net.com or ☎ 0114 2438653. Also have various hard/software. Any Sheffield groups?

Are you interested in helping other Amiga users? If you are then join the Amiga Helpline. ☎ Terry 01709 814296. Also, 22 boxed, original games for sale, £2.50 to £6.50.

A1200 contacts wanted for swapping ideas, tips, games and anything to do with Blitz Basic. Contact Mr. T. James, 26 Hawley Street, Margate, Kent, CT9 1QA.

A1200 helpline. New A1200? Having problems? New Hardware? Can't get it going? ☎ Martin for free help! 01789 293067, 9am-12am or all day Sunday (answerphone). I'll call back.

Programmers, graphic artists and musicians needed for a new project team called Amorphous. Contact Leon Brown, 43 Gwydir Street, Liverpool, Toxteth, L8 3TJ.

Amiga user, beginner, needs looking after. Could also swap games and programs. All letters or phone calls answered. ☎ 01752 268386 (24 hour answer machine) or write to: 5 Haystone Place, Millbridge, Plymouth, PL1 5DU.

Help! I'm having trouble with ShapeShifter software. I can't get it running. I will help you with Amiga problems. J. Taylor, 13 Thorpe Street, Boothtown, Halifax, West Yorkshire, HX3 6HP.

USER GROUPS

User group ads will be printed for three issues.

New user group starting up in Bodmin, Newquay, St. Austell and Truro. ☎ Clive on 01726 822061 after 7.30pm on weekdays or at any time on weekends.

XCAD users group want to attract as many XCAD users as possible. Interested in joining and receiving the "XCAD User" newsletter and tutorials? ☎ Tony 01662 250320 after 6pm.

Are you interested in helping other Amiga users? If you want to join the Amiga free helpline, ☎ Terry 01709 814296.

Power Amiga – New Amiga group in Portsmouth, for Internet, video graphics, scanning, digitising, word processing, desktop publishing, animations, CD-ROM, games, support, etc. Monthly newsletter. ☎ Richard 01705 829541.

Edinburgh Amiga Club. Meets every second Tuesday at Gilmerton Miners Welfare Club, 7pm – 11pm. Tutorials for beginners, information at all levels, hardware and software help. Email jim@eac.ednet.co.uk.

Maidenhead Computer Club. One of Berkshire's longest established computer clubs, new members welcome. Meet every second Thursday of the month, 7.45pm, Community Centre, Highfield Lane, Cox Green, Maidenhead. ☎ Alan Everett 0118 9453420.

Amiga enthusiasts wanted to join forces against Amiga-hating Channel 4 Teletext page, Digitiser. To join, send SAE to Kill Digitiser, 81 Doncaster Road, Selby, North Yorks, YO8 9BU.

East Lanc's Amiga Club. Free membership. We are willing to help you with any problems you have. ☎ Mark 01254 728115 or write to 70 Tintern Crescent, Blackburn, Lancs, BB1 5RY.

Coventry and Warwickshire Commodore Computer Club. Meet first Wednesday of every month at Earlsdon Methodist Church, Coventry, 8pm – 10pm. ☎ Will Light 01203 413511 or Ed Freeman 01788 812138. Email luke.stowe@ukonline.co.uk

Deal Amiga Club. Meet every Friday, 7pm – 11pm, St. Johns Ambulance Hall, Mill Hill, Deal. ☎ 01304 367992 / 379857 or email amiga.club@centrenet.co.uk.

X Zone BBS, West Berkshire's coolest BBS with nearly 3,000 files online, pictures, MODs, HD installers, utils and more. ☎ 01635 820590 now (6pm to 1am, 33.6K BPS).

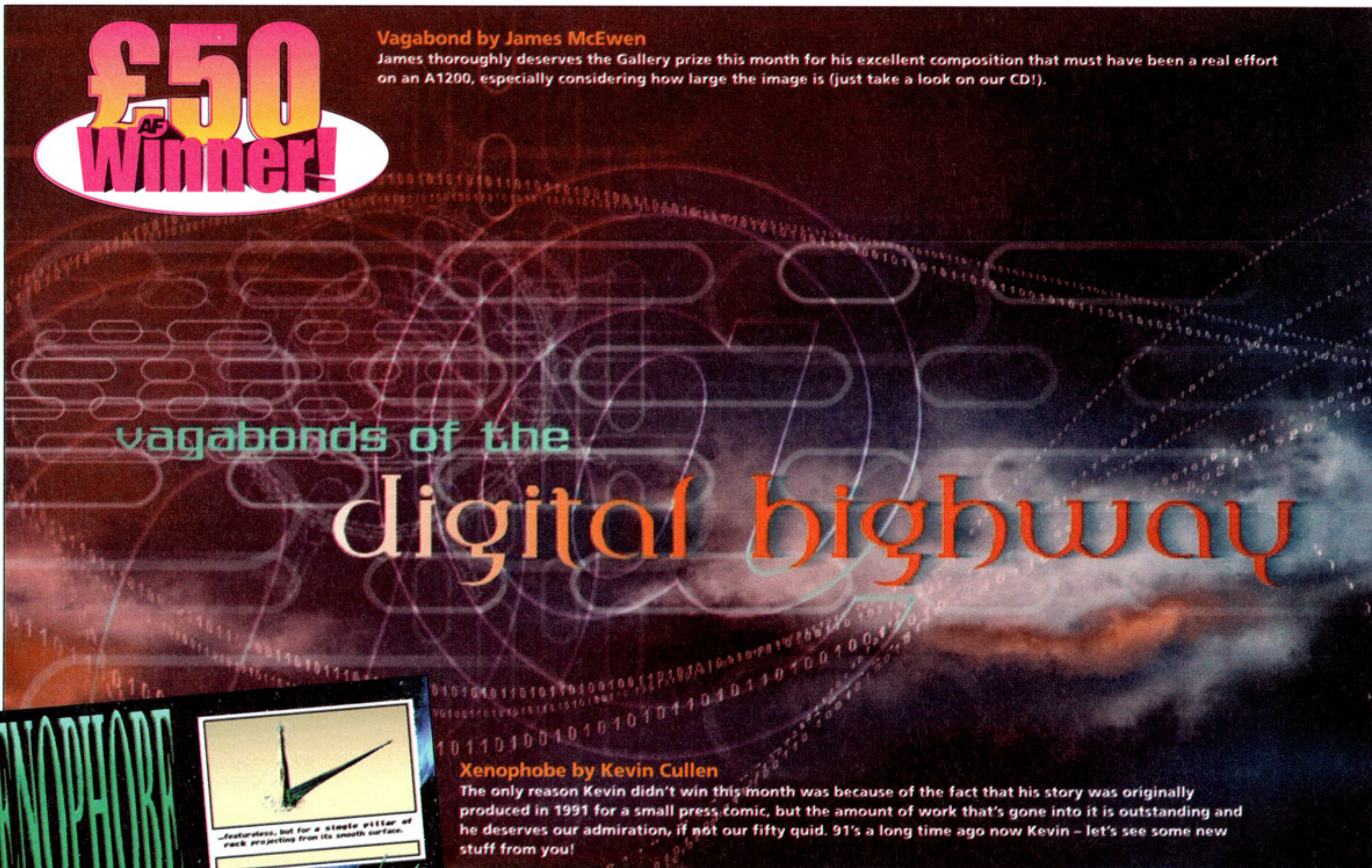
Amiga Design Workshop, UK. New group in Kent. Anyone in the south east welcome. Monthly newsletter, run by readers, database, stored lists of animations, art, music, etc which are sent to software houses/websites, competitions, discounts on Amiga Energy mag. Write to: 18 Gull Close, Roundshaw, Wallington, Surrey, SM6 9EU.

The Gallery

ON THIS MONTH'S CD

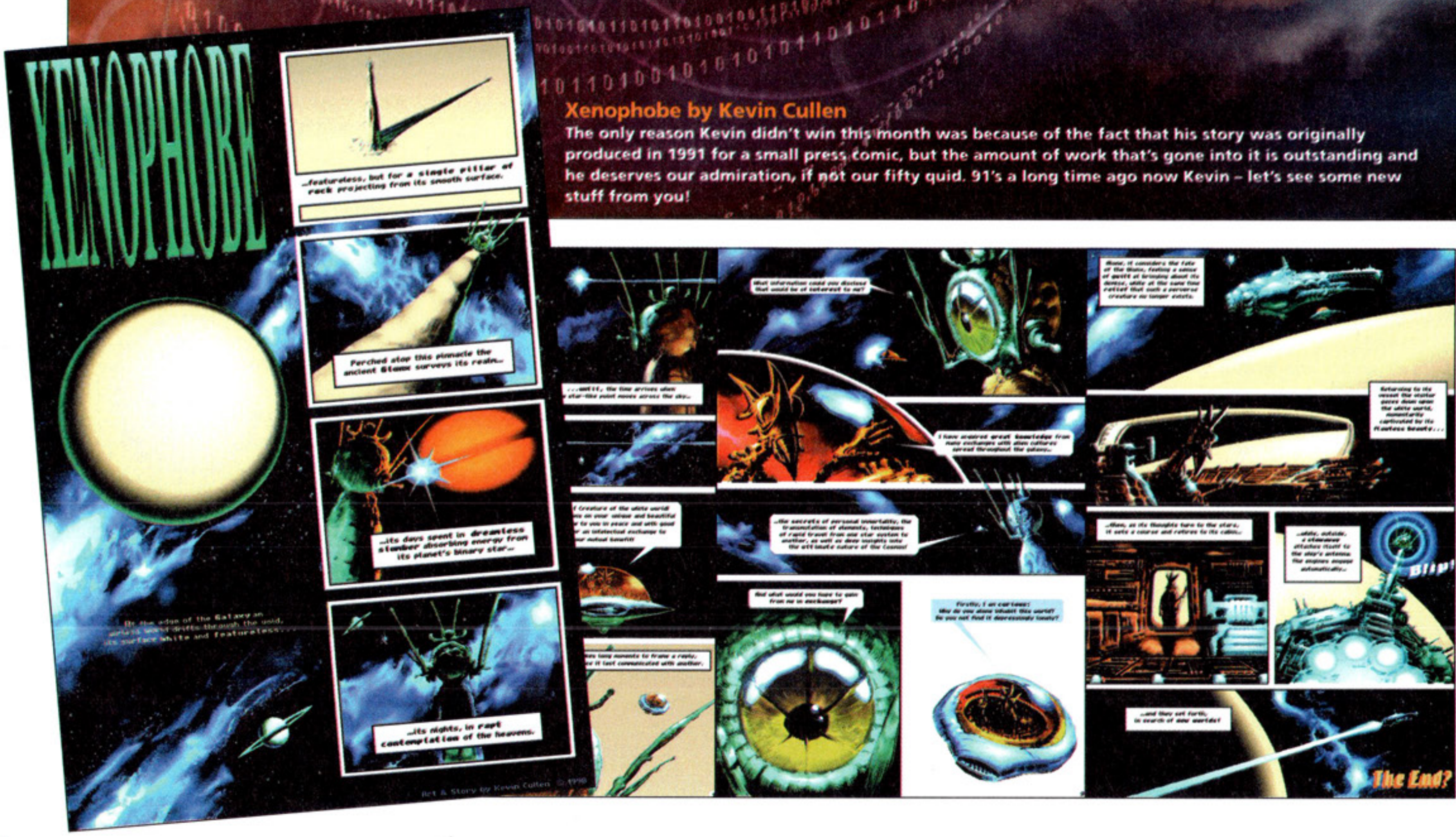
AFCD31:-ReaderStuff-/-Gallery-

Everything from pictures of stag beetles to swords await **Ben Vost**'s judgement in this month's Gallery.



£50 AF Winner!

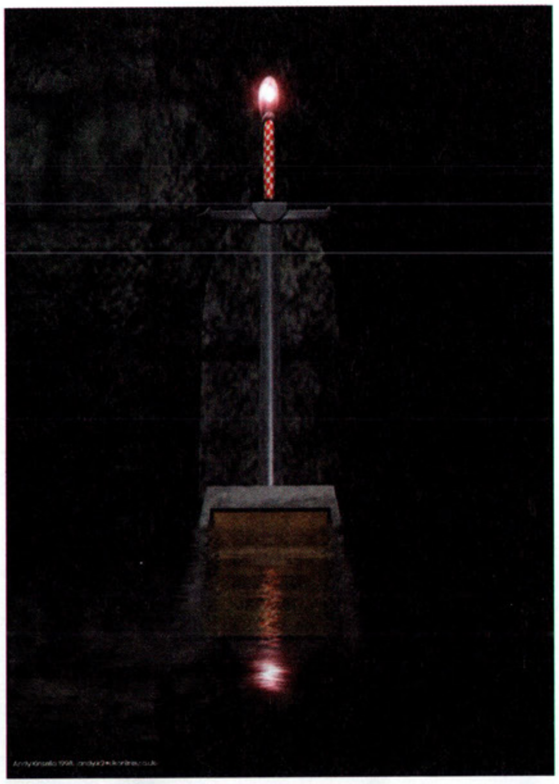
Vagabond by James McEwen
James thoroughly deserves the Gallery prize this month for his excellent composition that must have been a real effort on an A1200, especially considering how large the image is (just take a look on our CD!).



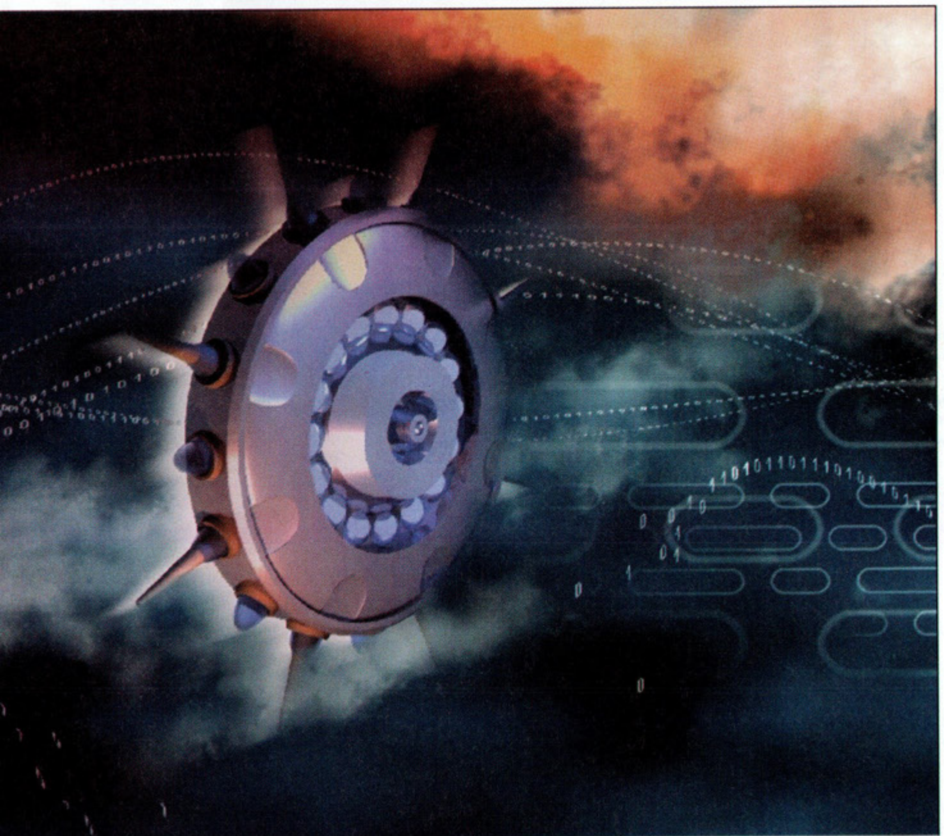
Xenophobe by Kevin Cullen
The only reason Kevin didn't win this month was because of the fact that his story was originally produced in 1991 for a small press comic, but the amount of work that's gone into it is outstanding and he deserves our admiration, if not our fifty quid. 91's a long time ago now Kevin – let's see some new stuff from you!



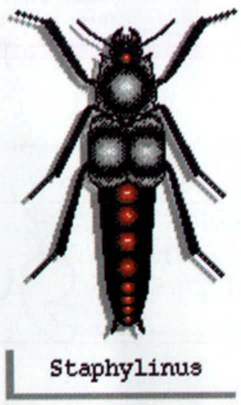
Wald by Markus Pohlmann
This *VistaPro* (?) rendered image has had a nice moon added to it to give it more personality. In case you're wondering, "Wald" means forest in German.



The Kings Tomb by Andy Kinsella
Another huge image. Andy even had to boot with his machine completely stripped of good stuff to be able to edit it. The effort paid off though, since it looks gorgeous in print.



Send your Gallery artwork to AFCD Submissions, Amiga Format, 30 Monmouth Street, Bath, Somerset, BA1 2BW or email them to afcdsubs@futurenet.co.uk. Please don't send any files over 1Mb in size. Also, see the submissions advice file on the CD for further options.



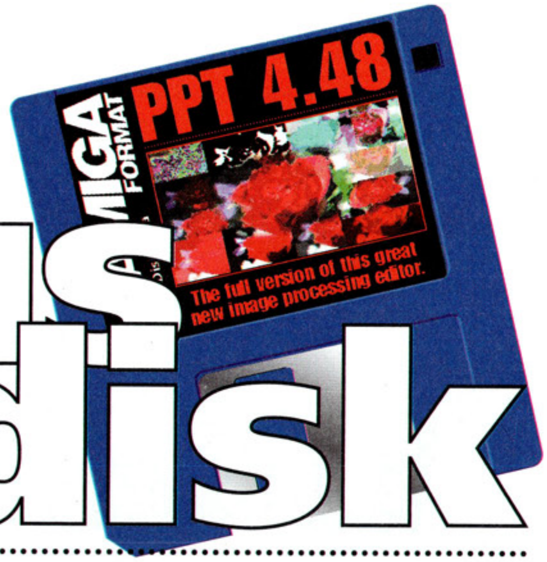


Stag Beetle & Staphylinus by Marcus McMullan
We liked the "museum piece" look of these anatomical illustrations. Were they produced for a particular project, Marcus?





T-38 Talon and Banked Turn, both by Graeme Porter
One of a selection of plane images that Graeme's done this month, this one (right) has a particular sensation of speed. The silhouetted T-38 (above) is also very atmospheric, very *Top Gun*. I can almost hear Berlin now...



Serious AMIGA FORMAT disk



It's not often that a fully fledged image processor appears on a coverdisk, so David Taylor is rather pleased to introduce this month's capable offering.

PPT4.48

PPT is a rather effective image editor that allows you to load, add effects and then save out your work in a variety of formats. The biggest part of the program, as you can see, is given over to effects that you can add from a window.

When the program is started, you'll see only a few windows open. You can open the others from the Window menu on the right.

> The windows available are Loaders, which allow you to load an image from one of the supplied file types...

The windows available are Loaders, which allow you to load an image from one of the supplied file types; Effects, which applies one of the many effects detailed here; Selected Area, which shows the details of any selection within an image; and a List of Frames. Frames are the pictures that are open. You can have more than one picture open at once and they will be shown in a list here.

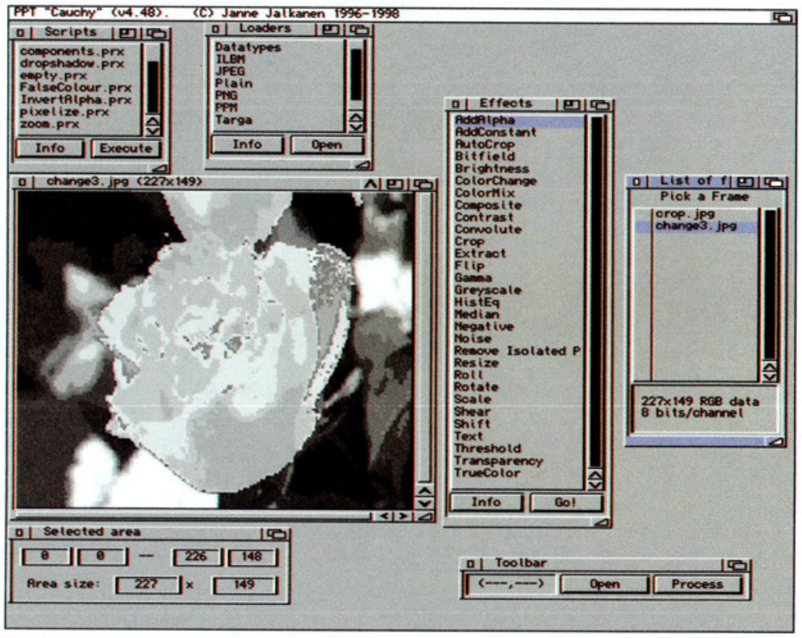
If your screen gets a little crowded, you can hide a frame using the option in the File menu or using the gadget in the preview of the image. The gadget is at the top right corner, along with the Bring to Front and resize gadgets.

Aside from the obvious Opening and Saving of images, the menus drive other features, like the multiple undo feature, zooming in and out of an image and correcting the aspect ratio of an image, where you can resize the preview windows by dragging out the bottom right handle and correct any stretching of the image that occurs.

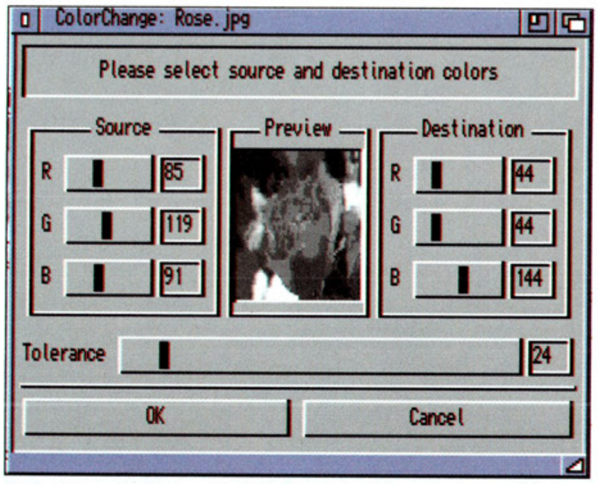
The two other areas you should investigate are Main Preferences from the File menu and Display Preferences from the Display menu. The first allows you to change settings like the directory, to be used as virtual memory which will allow you to open more images than your RAM can handle. This is one of the reasons why the program requires a hard drive. You can also set up the screen settings for the editor, including size and fonts.

The Display settings refer to the render screen. When you edit a picture you are working on a preview screen, but when you want to see exactly how the proper image looks, you can render it from the Render menu and it is these settings that will then be used.

The best way to progress with *PPT* is to get stuck in, so look at all the effects on offer and start making some changes to your picture collection. Manipulation is the name of the game.



The *PPT* program uses the recognisable set of windows that should make it a very familiar working environment. Each section has a window and it's in these, more than in the menus, that the work is done.



Most of the effects from the Effects window have a requestor like this one where you can set parameters and values for the effect. This makes the program very flexible and able to do things to the degree you want.



The Preferences are the only two parts of the program that you should look at before starting so that it is tailored to your system.

ADD ALPHA:

This allows you to add a greyscale alpha channel to the image. This is used to allow cut-outs on other processors.

AUTOCROP:

Allows you to reduce the size of the selection in height and width by selecting the number of X and Y pixels you wish to reduce the image by. A preview panel gives you an idea of how the picture is being affected.

BRIGHTNESS:



Where the Add Constant effect adds to one or multiple colour values, Brightness adjusts the overall values so you can increase them all and make the image brighter or reduce them and make the image darker, as we have done here.

COLOR MIX (SIC):

This effect mixes colours so that the new one is a linear mix of the old colours.

CONTRAST:



Enhances the differences between colours, so the lighter colours become lighter and more pronounced and the darker ones are deepened to fall away. The inverse effect can also be applied by using a negative value.

CONVOLUTE:



Makes adjustments to the pixels surrounding the centre pixel. The centre pixel is shown as a 1 in the centre of the Convolute matrix. You can load preset convolutions and create and save your own. For example, there is a blur convolution ready, as shown here.

EXTRACT:



Extracts all the colour of one type (red, green or blue) from the entire image. Here red has been extracted so that the G and B values are removed, leaving only shades of red.

NEGATIVE:



Obvious really. It inverts the colour values so you have the opposite of what you started with, in exactly the same way that the negative of a photograph is opposite to a print.

NOISE:

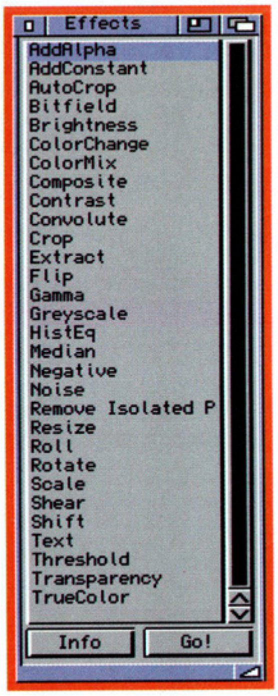


This effect adds noise by percentage and by adding or removing pixels from the colour values of pixels.



The original image before we started adding any of the included effects to it. When you add effects, you can either add them to the entire image or to a selection.

A selection is made by dragging out an area on the image with the mouse. This Effects section contains most of the effects offered by *PPT*, but you can also add others using the Scripts which are supplied that make use of a number of effects at pre-defined levels to produce another overall third effect.



ADD CONSTANT:



When you add this effect a requestor gives you three sliders that allow you to choose how much of each of the RGB values of every pixel are in the selection. Using this you can add or subtract different amounts of red, green or blue from each pixel. Here we have added a moderate amount of red.

BITFIELD:



This extracts fields of colour from the image. Try it out, but make sure you're wearing your psychedelic hat.

COLOR CHANGE (SIC):



This is a quite a neat idea actually, and would be especially useful in editing cartoon art or clipart.

You can select a colour in the source part of the requestor by choosing its values using the RGB sliders and then choose a new colour using the destination sliders. With a tolerance slider at the bottom, you can also choose how close to your choice of exact colour value a colour has to be in order to be included in the effect. For example, by using this you can choose to turn everything red in an image to yellow, or green to blue as we have started to do.

The best way to implement this with photographic images is to start at the low end of one colour band, use low tolerance and change that set of colours to one in the low end of the colours you want to end up with.

For example, change the deep greens to deep yellow. Then move up through the colour by changing the values of both source and destination. In this way, you'll end up with all the shades of the new colour used in the same ratio as in the original colour.

CROP:



Select an area of an image and then cut away everything outside it so you crop in on the selection.

AND THERE'S MORE...

GREYSCALE: Turns a colour image into a greyscale one.
HISTEQ: Equalises the histograms of the colours in the image. A histogram is a graph of the colour values used in an image. The spectrum of colours appears on the X-axis and the proportion of the image using that value in the Y. The effect levels out this graph.
MEDIAN: The Median filter averages the values of pixels surrounding each one according to the amount specified. Essentially, it just blurs the image.
REMOVE ISOLATED PIXELS: No hermits allowed. This feature removes pixels whose values differ from those around it. Useful for removing marks.
RESIZE: Resizes the picture to a new height and width, as defined in pixels. The image remains the same size, only the canvas size is changed (see Scale).
ROLL: Remember how TVs sometimes used to lose the picture when not properly tuned and the picture would roll? This allows you to roll part of the image both horizontally and/or vertically so the other part comes in from the other edge.
ROTATE: Turns the selection through a defined number of degrees.
SCALE: Changes the selection or image size. This allows you to resize so the picture changes dimensions. You can retain the original aspect ratio or stretch the image. You can define this in pixels, per cent or mm.
SHEAR: Shears an object as defined by per cent, either horizontally or vertically.
SHIFT: Moves an image a defined number of pixels in any direction and leaves any remaining space black.
THRESHOLD: The simple thresholding of an image's colours.
TRANSPARENCY: Sets up the transparency information in an image, through which you can see items below. This is only of use in certain situations, but the requestor does allow you to choose the colour/s and any tolerance you want.
TRUECOLOR: Attempts to turn a greyscale image into a colour one.

Games disk

AMIGA FORMAT





Strange though the name may be, ***KAK*** has become a well-rounded adventure game that should keep you quite entertained. **Dave Taylor** introduces the two demos on this month's disk.

KAK

The name of the game gives you an indication of its mischievous demeanour. *Kak* is a graphical adventure that lands you in the role of a lowly serf named, amazingly, Kak. Our eponymous hero has grown up as an orphan, outcast from the village and raised begrudgingly by those who feared him. "Feared him?" I hear you ask. Yes, for *Kak* has the mysterious ability to command dung.

All this unlikely nonsense sets the scene for a game where you play a very unlikely hero who has the rather handy ability to throw dung. Thus armed, you can fight your way around the playing area, solving puzzles. The game has been written to take advantage of a CD[32] joypad, but can be played equally well with a normal joystick.

The controls are simple enough. Directional controls move the character and fire shoots a low-power dung shot. You can also increase the power of a shot by holding down fire and then releasing it. If you come across an object you can pick it up and it will be added to your inventory.

To open the object screen, press the Space bar. The objects are split into types and are displayed in different sections. Only one object per category can be active at once. You can switch between objects by using the cursor keys, and the Enter key on the numerical keypad will switch you between object sections. Press the Space bar again to close the object screen.

> "... beware of the angry fungi that lurk, firing blobs at you. You can defeat them with your dung..."



Due to the numerous giant mushrooms, the castle is locked, and so our dung-manipulating hero begins his adventure...

The active object for the different sections is shown in the bar at the top of the screen, along with your life force. This is shown as a set of hearts that decrease when you are hit. To drop or use an object you use one of the arrow keys. The three sections, Weapon, Utility and General have different windows showing the current object in the top tool bar. The left arrow uses the Weapon, the down arrow the Utility and the right arrow the General. If you want to interact with things, press fire when pointing at them.

For example, to open a door, push towards it and press fire. To talk to any characters you meet, face them, press forward and press fire. If you're able to talk to someone, a Talk icon will appear in the gem part of the top bar.



Kak having a chat. This provides information and a good laugh at the adventure genre.

When you press fire, a dialogue will be started and you can press fire to move through the parts. All the speech attempts to be humorous, so make sure you read it as it will not only give you clues on how to proceed, it also pokes a little fun at the genre.

As you travel around the garden, beware of the angry fungi that lurk, firing blobs at you. You can defeat them with your dung, but every time you're hit you lose valuable life power.

FINDING YOUR WAY

You have been sent to the castle from your village to take on a new position. However, when you arrive you can't get into the castle because an evil has struck the place with, well, let's be honest, big mushrooms. These have the people in a flap and the castle has shut its doors.

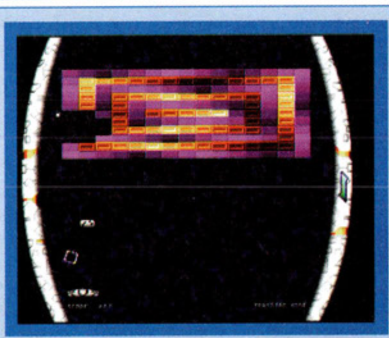


Kak about to partake in a little dung-throwing target practice.

DECONSTRUCTION

This game is a radical reworking of *Breakout* and requires a hard drive. This game remains a favourite, even after all the years since I played it on a Sinclair Spectrum as a nipper, so this new game with tons of new features is well worth the space on my hard drive.

When you've unpacked the game and started it, you'll immediately see that the programmers have spent their time polishing it. There are several options on this screen where you can find out more about the game and how to buy the new version or see a demo. To play the sample levels, select Game.



New additions to the traditional *Breakout* gameplay include numerous power ups.

The controls use the mouse. When you start the game you'll see your paddle at the bottom of the screen. When you press the mouse button the ball will be launched. The game is simple enough. Each time you bounce the ball off a brick you will either destroy it or weaken it. Not all bricks can be destroyed by one hit and different colours have different strengths. Some tiles are totally indestructible, but these can be used to your advantage. When the ball hits a tile it also bounces off it, even if it has destroyed it. The game really consists of judging angles. The ball will come off the brick at the inverse angle it hit it at, so if you hit it at a 45 degree angle from the bottom left, it will come back down at 45 degrees to the right. You need to make sure your paddle is ready to knock the ball back up. Obviously, the aim of the game is to stop the ball from being dropped and to destroy all the blocks. To do this, you can try to knock the ball up to the top of the pile of bricks because it will bounce off the walls and a ceiling, so if you can get it up there, it will destroy the wall from the top, doing your job for you. Likewise, indestructible bricks will knock the ball back up if it is hit from above as they would knock it back down if you hit them from below. These are the basics of many games of this type. Where this game differs is the amount of power ups. Some bricks will drop items as you hit them. Some of these will be damaging, but they will mostly have a range of useful effects. For example, one which shows a set of arrows pointing out will expand the bat so you have more chance to hit the ball. Another will power up the ball and yet another can turn it into a cannon ball. This will only bounce off walls, not bricks, and simply cuts through all the bricks in its path, except for indestructible ones. There's one that will teleport you directly to the next level and another to open up your bat so that instead of just knocking the ball back up, you catch it. Then you can move and fire it back up by pressing the mouse button. This allows you to aim your shot more. Best of all, you can also get one which gives you a weapon so you can shoot the bricks as well as knocking the ball off them. The only thing to note about this is that it's easy to get carried away and forget that you have to keep your eye on the ball too. The full game can be bought for £16 from the address in the game. For more details, see the Fullgame section in the demo.



The graphics have been updated and polished, but the gameplay remains as addictive as ever.

When you start, walk up the screen and you'll find your first nasty. When you run into these, shoot first and don't bother with any questions. You should find that you can also outrun most baddies and run rings around their shots and this is the key to being able to kill them without taking any damage.



Here's little Kak wandering around the garden. Watch out for the mushrooms.

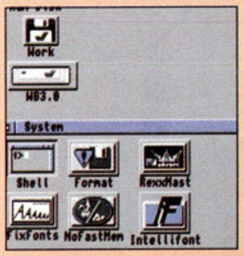
Also note that the closer you are to an enemy, the quicker you can fire. This is because you can only fire one dung shot at once. Less distance to the target equals less time so you can dispatch them quicker, but be careful – once your life bar hits zero, the game is over. As you get into the garden you'll find you have to explore and talk to anyone you find.

The first person will be a lady who has lost a necklace to a bird of prey. To get it back you need to tempt the bird down and you should find what you need in a house nearby (no, you can't just throw dung at it – do you want the RSPB down on the lot of us?). This is pretty much all the introduction you need.

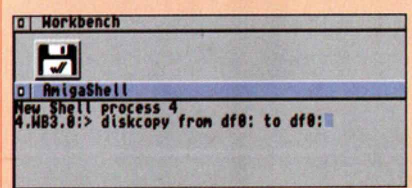
We don't want to give you the full game solution but you should have enough here to know how to solve the sort of puzzles that you'll encounter. To quit the game, press F10 at any time.

BACKING UP YOUR COVERDISK

Copying your Coverdisk is really very simple. Just follow the stages below...

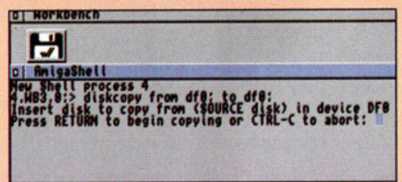


1 **Boot up with your Workbench disk and find the Shell icon, in your system drawer. Double-click on this to go into the Shell.**

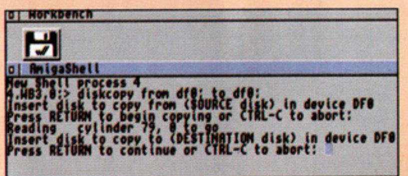


2 **Type in the following line (with a zero, not the letter O), taking care to put the spaces in the correct places:**

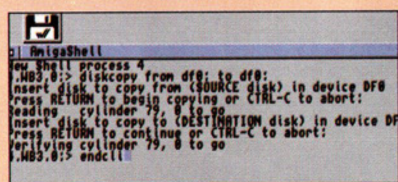
DISKCOPY FROM DF0: TO DF0:



3 **When asked for the Source disk, insert your write-protected Coverdisk and press Return. All of the info on this disk will then be copied from the disk into memory.**



4 **Once your Amiga has read the info, it will ask for the Destination disk. Insert it and press Return. All information on this disk will be destroyed.**



5 **On an unexpanded machine, the Amiga may ask for the source disk again, because it copies in chunks. Finally, type endcli to close down the Shell.**

DISK NOT WORKING?

We take every care to test the Coverdisk software, but Future Publishing cannot accept any responsibility for any damage occurring during its use. If your disk is faulty, send it back, with 2x26p stamps and an SAE to:

***Amiga Format* (insert name of disk)**
TIB PLC • TIB House
11 Edward Street
Bradford • BD4 7BH

If there is a manufacturing error then the stamps will be returned with a replacement disk.

* MakeCD 3.2 * Bonus audio track *



Cover disc



AMIGA FORMAT

Welcome to the sparkly wonder of ***AFCD31***! Ben Vost is your host on this magical mystery tour of the world's best Amiga CD.

NEW THINGS TO SEE

NEWICONS:

If you're a *NewIcons* afficionado, the first thing you'll notice about this month's CD is the fact that we have a new *NewIcon* for the disc itself. This was drawn by a talented American reader called Robert Miller. What's more, he's got a whole set of custom-drawn *NewIcons* to go on our CD next month, all in his own inimitable style that's not as cartoony as the default *NewIcons* set. I'll bet you can't wait...

AUDIO TRACK:

This month's CD might seem a bit light on content compared to our normal 645Mb+ blockbusters, but would we give you a CD that wasn't chock-a-block full? Of course not. The reason that the disc reports itself to only have about 550Mb is because the other 90 or so are taken up with a track from one of the audio CDs reviewed in this month's issue. The track is called *Deadly Strike '98* and it's from the *Digital Grooves* CD, reviewed in this issue.

AFCDFIND:

Two things to do with *AFCDFind* on this CD. To start off, we've archived up the indices for *AFCD1-10* on the grounds that a) the stuff on them will probably have been updated by now, b) you can't get them any more and c) we needed to use the space they took up to give you more stuff and less system. The second thing is an updated ARexx script to interface with DOpus. Some of you have had trouble getting it to work because the necessary library wasn't being called in time. The script on this CD sorts that out, or you can make sure you have something else call the rexxsupport.library first.

MAKECD 3.2

-Seriously_Amiga-/-Commercial-/MakeCD_3.2

If you haven't read our review on page 58 yet, you probably won't know that *MakeCD* has been seriously revamped for this release. If you live in fear of German user interfaces with their multitude of buttons and gadgets that just overwhelm you, it should come as a pleasant surprise.

MakeCD has now been drastically simplified for the novice and even though it maintains all the configurability that made it great for expert users too, the design for the GUI is now much clearer than before.

The version that's on our CD is only a demo, but be sure to read all the information on suitable CD-ROM writers on the *MakeCD* website (also on our CD) before you rush out to get the full version and a CD-R drive.

DO THE SAMBA!

-ScreenPlay-/-Commercial-/SambaDEMO

World Cup fever may have well and truly died down now, but you can revive it with the latest release from Alive Mediasoft, *Samba World Cup*! This game, which promises to be both a management game and an actual take-part-yourself extravaganza, should be with us in time for you to play this demo, so you can review it yourself and let us know what you think.

There are no instructions for the demo and I found it particularly confusing, so let us know if you can get it to run.





And it's in the net! Celebrations all round for England as they draw level with the villainous Argentinians.



LOOK AT MY WAD!

-ScreenPlay-/OtherStuff/Doom_WADS

Last month we gave you several hundred WADs to play with. Finished them all? Good, good, because this month we have more than 100Mb of new ones for you to sort through.

There are actually 284 new WADs here for you, some Deathmatch, others single player, some more puzzle-oriented, others bloodbaths. The only problem for us is that they are all PC levels created by PC owners. When are we going to have some nice Amiga *Doom* levels created by you lot on our CD?

We put *DEU*, the Amiga port of the best-known *Doom* level editor on the CD every month, so let's see you use it!

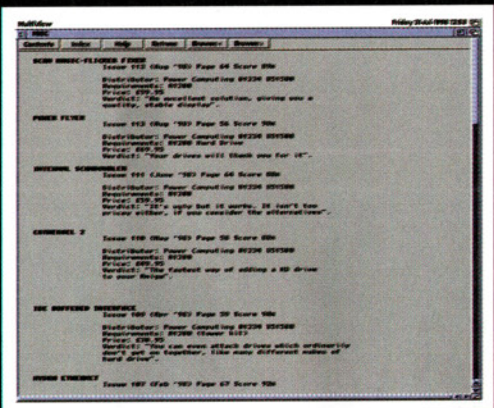
* **Doom WADs** * Samplitude demo * **MegaDemos** * Samba World Cup demo * **Your stuff** *

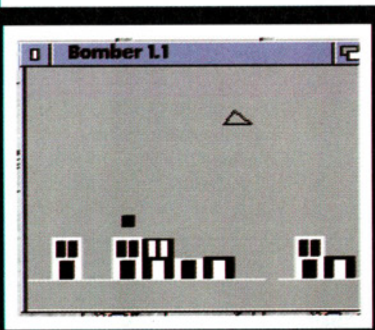
Your Stuff!

£50 AF Winner!

Roughly 45Mb of stuff from you this month, and quite a varied batch it is too. For a start, we have Mark Klocek's little Workbench toys, a doodling package, a clone of that hoary old game *Bomber* that runs in a WB window (and that I first played on a PET back in the seventies!) and *Asciimilator,* the nattily-named, bitmap-to-ASCII text converter, suitable for all those huge ASCII art sigs. Then there's Danny Shepherd's *FileMagic,* a simple yet useful file manager (everyone should have one!) for those who don't have DOpus.

Peter Hutchinson narrowly misses out on the reader prize again for his selection of hand made printer drivers for deskjet and other printers, while *EdScape* from Stephen Strickland puts you in charge of a lunar lander (another flashback to the late seventies for me). Glenn Robinson has created a real labour of love with his hardware reviews guide file, which details a lot of the stuff we've covered in *AF* since time began. Trevor Taylor has sent us a huge amount of *Lightwave* material, so much, in fact, that it has to be spread over this CD and the next one, but it's Stu Mackie who takes the biscuit.





His colourful and fun *Blitz Basic* creations have won him the reader prize this issue. He gave us two programs, *Metrix* and *QuizMaster. Metrix* is a unit conversion tool that would probably have better suited a more sober approach using an Intuition GUI so you could have a window on your Workbench, but it looks great. It also gives you all kinds of units people probably haven't used since the dark ages. *Quizmaster* is one of those pub quiz machine-type affairs, with a tricky "move around the board to get your prizes" kind of thing. It's easier to play it and see for yourself than for me to describe it, so give both a go. Well done, Stu!





Stu's colourful programs are the nicest we got this month, so he wins the Reader Prize!

TAKE A BREAK FROM QUAKE

-ScreenPlay-/OtherStuff/Quake_Addons

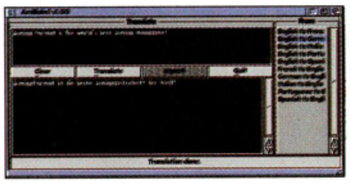
If you're fed up with the doom and gloom that is typical in a normal *Quake* session (ooh, that music especially gives me the chills… brr), then perhaps you might like to take on the more cerebral pursuit of Chess, hmm? Fortunately, you don't have to give up playing *Quake* to play Chess since there's a TC (as total conversions are known) that allows you to do just that.

If you recall *BattleChess* from Interplay, all those years ago, then you'll have some idea of what this is: a 3D version of that, basically. If you'd rather fly about than stroke your chin in deep thought, perhaps *AirQuake* will be more up your street. In this TC, all the monsters are converted into different sorts of vehicles and you yourself are in a plane. Neat, huh?

BABBLE ON

-Seriously_Amiga-/Comms/Other/AmiBabel

Here's an interesting one. If you're online, you probably know about the various translation servers that exist, which search engines use to translate web documents in a foreign language into something you can understand.



Sprächen sie Deutsch? Parlez-vous français? Parlate Italiano? If not, you could always use this.

AmiBabel does exactly the same thing, only with text you input yourself into its main window. You can then choose which language you'd like it to be translated into and it'll go off onto the net to change it for you.

The translations aren't always very good, but they're better than nothing if you can't speak another tongue.

MEGADEMOS

-In_the_Mag-/MegaDemos

Again, we have four new demos for you this month. As always, we check these demos for rude words and content and they are all fairly harmless, but there are occasional bare breasts and the like. If you're easily offended by such things, remember that we did warn you.

READERREQUESTS

-In_the_Mag-/Reader_Requests

Our ever popular Reader Requests section on the CD gets calls for all manner of items every month. Please note that no, we won't be able to put *Real3D2* on the CD again, or *PPaint,* or *Imagine* or any of those other commercial bits of software that we've run in the past, so please don't send us requests for them.

However, we can put things like the Aminet index for the day we compile the CD, *GlobalTrash,* a preview of *Gloom 3,* a game where you have to splat pies in Bill Gates' face and such like in this drawer. And whaddya know? That's exactly what's in there this month.

SAMPLITUDE DEMO

-Seriously_Amiga-/-Commercial-/Samplitude_Demo

Simon Goodwin reckons this is the bee's knees and he should know. It's a demo of a German sampling package made by

Continued overleaf ➡

At your fingertips

FONT FREEDOM

-Seriously_Amiga-/Misc/Freedom

If you have a large collection of TrueType fonts that you currently use with *PageStream*, but you get frustrated because you'd like to use them in *PPaint* too, well fret no more. *Freedom* is a new font library which allows you to use TrueType in much the same way that you can currently use Agfa Compugraphic fonts. Install it and all those .TTFs will now be useable.

BETTER SOUND

-Seriously_Amiga-/Sound/AHI

There's a minor update to *AHI* in our Sound drawer this month, for all those people who don't have a soundcard. The Paula update offers some bug fixes and faster operation – well worth having for all those games that need all the horsepower they can get.

⬅ ACT's expert, Marc Albrecht. It will handle audio playback from your hard drive at CD rates and more. This is only a demo so don't expect to save out loads of work, and you'll have to remember to set the assigns before you start or it'll complain, but it truly is amazing if you have a need for professional quality sampling.

STFAX UPDATES

-Seriously_Amiga-/-Commercial-/STFax

If you are one of the lucky users of *STFax* but you don't already have an Internet connection, you'll be pleased to see that our latest CD has a bunch of patches and upgrades for the plucky fax/voicemail software. The latest version works in conjunction with the excellent Pace Solo modem to allow you to retrieve faxes and answerphone messages from it when you switch your computer on.

YAM ICONS

-Seriously_Amiga-/Comms/Other/YAM2ColorIcon2
-Seriously_Amiga-/Comms/Other/NI4YAM

If you are now using the excellent *YAM* that we had on our last CD, you might prefer these icons to the *MagicWB*-style ones that come with the package. Both are simple enough to install and you can keep a backup of your existing images by renaming them all *.old.

AMIGA FOREVER!

-Seriously_Amiga-/Hardware/TransADF

If you (shock, horror), have a (spit) PC, and you want to use Amiga disks on it, YOU CAN'T! HA HA HA!

Ahem. Actually you can. Kind of. Using *TransADF* on your Amiga will translate a complete Amiga disk into an ADF file that can be used with *UAE*, *Fellow* and *Amiga Forever* (which uses *UAE* anyway). In fact, its uses don't end with PC emulators of Amigas.

As *TransADF* actually creates image files of disks, there's no reason why you couldn't use it instead of *DMS*, especially since the kind of compression it can use can be better than *DMS*'s.

Of course, for those of you who are expecting to be able to play a proper version of *Sensi* on your PC thanks to this, it won't allow you to play or use Amiga software on your PC any more than *CrossDOS* allows you to use PC software on your Amiga.

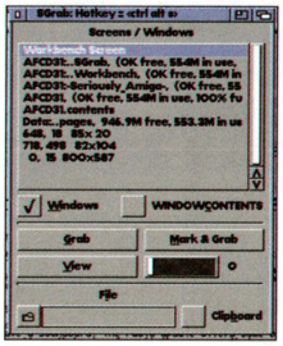
GRAB IT!

-Seriously_Amiga-/Workbench/SGrab

If you have a graphics card, it can sometimes be frustrating to grab a screen and discover that the picture's garbage because the grabber you've used doesn't understand the way that a 16-bit screen is made.

There's *CyberGrab* of course, but that's stuck to the Shell so it's not very user-friendly. Step up *SGrab*. Based on *CyberGrab*, it offers a nice GUI for Shell-haters, and has pretty much all the power that *CyberGrab* has. In short, it's very good and will work just as well for normal AGA screens as it does for true-colour graphics card screens.

Much easier to use than the Shell-only *Cybergrab*.



DISCLAIMER

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You can either send it to us on floppies, Zip disks or CDs (we do take other media formats too). If you are going to send us a multiple floppy backup of your work, please use the version of *ABackup* we supply on the CD in the +System+/Tools/Disk_Tools drawer. We'll return any Zips you send us, so don't worry about getting your disks back.

If you have any further queries about how to send your software in then consult the Submissions Advice on the CD (in Ben_Speaks!, or in the ReaderStuff or +System+/Info drawers).

Your signature: ....

Files you send in this month will probably appear on *AFCD33 – Amiga Format* issue 117, December.

Please tell us:

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AF 115 – OCT 1998

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If you have a feature idea, a long term test, a reader request or you want to be in the Amiga Angels list, send an email to benvost@futurenet.co.uk, with "Features", "Reader Review", "Reader Request" or "Amiga Angels" in the subject line accordingly. If you don't have email, a letter to the *Amiga Format* address with the same subject headings is also fine.

If you want to speak to us about a technical problem, we have a reader call day on Tuesdays. Call us on (01225) 442244 (10am–1pm, 2pm–5pm only). We're sorry, but we can't give games tips over the phone.

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Next **Month**



Fleecy Moss' guide to new hardware

Your exclusive guide to the latest technology and hardware which you will be connecting to your next generation Amiga soon.

PLUS: *Reviews of:*
***Power Movie**, Tornado 3D 2, **CybervisionPPC**, ISA Catweasel, **Hypercom Port Plus**, Sequencer One +, and all the latest games and **Quake** extensions.*

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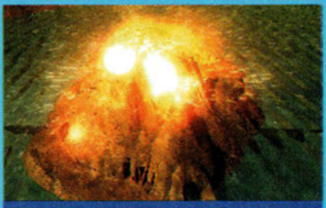
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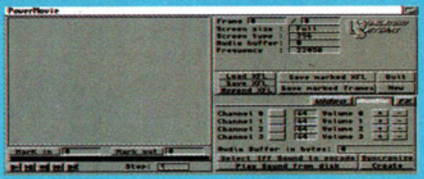
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Power Computing is in the process of licensing PowerMovie according to its final use in order to keep its price down. Amiga enthusiasts will be able to buy the software with a cheaper licence for personal, strictly non-commercial use. Commercial usage requires a business licence for companies planning to use the software and the files it creates for commercial products i.e. video games, Multimedia, Info-Points, etc.



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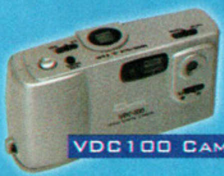
Oliver Roberts, of F1GP Editor's fame, is the author of the Power DC, the software for Power's Digital cameras.

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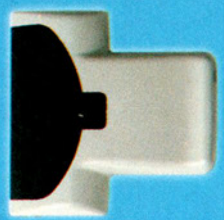
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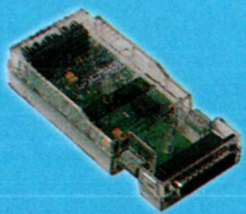
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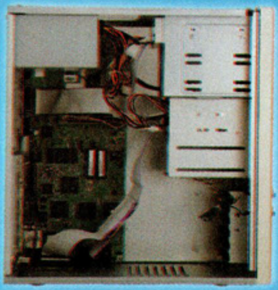
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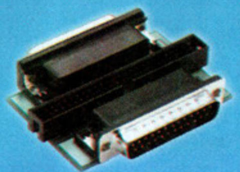


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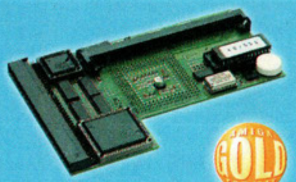
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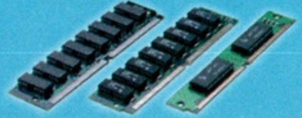
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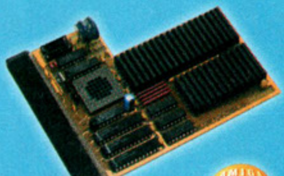
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